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WESTERN RESERVE UNIVERSITY CENTENNIAL HISTORY OF THE SCHOOL OF MEDICINE

FREDERICK CLAYTON WAITE

WESTERN RESERVE UNIVERSITY PRESS

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THIRD BUILDING OF THE SCHOOL OF MEDICINE OCCUPIED IN 1924

WESTERN RESERVE UNIVERSITY
CENTENNIAL HISTORY
OF
THE SCHOOL OF MEDICINE

BY

FREDERICK CLAYTON WAITE

Professor Emeritus in Western Reserve University

CLEVELAND

WESTERN RESERVE UNIVERSITY PRESS

1946

1. Fth. 245.

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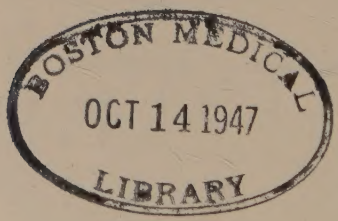

Printed in the United States of America

PREFACE

In Chinese culture the drama is a prominent feature with a unique method of presentation. A single drama is presented as a series of performances and may continue through several years before being completed. Each performance is an episode in the life of some national or mythical hero. No two episodes are identical, although the composite of the series is a single progressive story. The actors change, as does the audience.

Similarly the history of an educational institution is a series of episodes, no two exactly alike. The chief actors—the professors—change, as does the audience—the students. The successive performances unfold a story of life and action.

New members of the cast come on the stage with new conceptions of how to perform their several rôles. Many are star performers and well merit the applause given them at their exit. A few fail miserably to play their part and their exit brings not applause but relief for the other members of the cast and the audience. Many of the cast, as far as the audience can discern, are little more than supernumeraries, but among them are some who, closely watching the performance of the stars, after a time come themselves to succeed to leading parts.

If all the world is a stage, one of the interesting portrayals on that stage is the series of episodes in a progressive educational institution.

The purpose of this book is to unfold the drama of the School of Medicine of Western Reserve University as it has been acted in a series of performances extending over a period of one hundred years. As in the theater, the story opens with a prologue. It embraces four short chapters.

No history of the School of Medicine has previously been written. Published addresses and articles in journals have touched upon some phases of its history, and numerous sketches and obituaries of men who have been members of its teaching staff have been printed, but nothing resembling a systematic treatment has before been attempted.

I have been collecting items and taking notes on the events

from 1843 to 1901 for nearly forty years. Many erroneous, contradictory, and confused statements made it apparent that a systematic history based upon authentic records would give to the teaching staff, alumni, and other friends of the institution information to replace the many traditions, some of them sadly awry.

Minutes of the faculty are preserved since April 1844. However, the minute book contains no entries from 1862 to 1868, years of difficulty during and following the Civil War. The file of catalogues is complete for all years in which record of publication of a catalogue has been found. Apparently no catalogues were published in a few years in the middle 'sixties. The records of the Board of Trustees are complete from August 1843. All of these have been critically and repeatedly examined in preparing the manuscript. However, I have not documented these sources but have written the dates of important events into the text.

My own official connection with the institution began in September 1901, when I joined the teaching staff of which I was an active member, with only one semester of leave of absence, for thirty-nine years. Since 1940 I have been an emeritus professor and an inactive member of the faculty, the meetings of which I have occasionally attended.

However, my knowledge of the institution goes back of 1901. I was an assistant in biology of the college of arts of the university from 1892 to 1895, and in that position assisted in teaching some students who were coincidentally students in the college of arts and in the medical department, in courses which were accepted as part of the requirements for graduation in medicine. Therefore I may say that my connection with teaching of students of this medical school began more than fifty years ago.

This is more than the history of one institution. The first four chapters endeavor to lay a background for the founding of this medical school and are concerned with events in medical education in America prior to that founding. Later in the book a chapter is given to the three rival local regular medical colleges. I am much indebted to the officials of the College of Wooster and of Ohio Wesleyan University for permission to

secure transcripts from their records concerning their medical departments. This has enabled me to write a more extensive historical sketch of these two medical colleges than has ever before been printed.

One chapter is given to homeopathic medical education in Cleveland. I have been permitted to consult the records of these medical colleges to secure the dates of important events in their history. I am also indebted to two former members of the homeopathic medical faculties for criticizing this chapter and for giving many helpful suggestions.

A chapter is given to the origin and progress of several hospitals in which students of this medical school have been taught, with especial reference to those hospitals with which the medical school has had a considerable relation. In some chapters I have described features of medical education familiar at the time but long since abandoned, of which physicians of the present day have little detailed knowledge.

Thus while this volume is primarily the history of one institution, it is to some extent a history of institutional medical education in Cleveland during a hundred years. During sixty-four of these years more than one medical college functioned in Cleveland. During eighteen years there were two, during thirty-five years there were three, and during eleven years there were four medical colleges in the city.

The narrative history of the institution is divided into six periods, each different in length, ranging from twelve to twenty years. Each period is ended with some important event. The entire story is arranged in five books. Book I, of four chapters, comprises the prologue. Book II, of five chapters, includes the founding, a biographical chapter on the founders, and three narrative chapters on the three periods of the first half-century. Book III is interpolated between the narrative of the first half-century and that of the second half-century. It contains three chapters of matters intimately connected with the institution, followed by two chapters concerning other medical colleges of Cleveland which are only ancillary to the main theme. Book IV contains the three narrative chapters of the second half-century, and Book V is made up of a biographical chapter on

the deans and a vice-dean, followed by a short chapter of a general summary constituting an epilogue.

Until July 1881 the official name of the institution of which this volume is a history was the Medical Department of Western Reserve College. Then the name Medical Department of Western Reserve University was adopted. This was not a complete legal name until April 1884, when a charter was secured for Western Reserve University. In 1912 the official name was changed to School of Medicine of Western Reserve University.

Early in the twentieth century an accepted authority defined a medical school as an organic part of a university with the financial control in the board of trustees of the university. A medical college, as opposed to a medical school, was defined as an independent institution or one of which the financial control did not rest in the board of trustees of a university, although the institution was called a department of a university.

The majority of institutions teaching medicine have adapted their official names to these definitions. However, thirteen institutions which fulfill the cited definition of a medical school are still officially called colleges; one institution is called a department and another a branch.

The reader will find as he progresses in this narrative that the financial control of the Medical Department of Western Reserve University was not held by the Board of Trustees until 1893. Therefore in familiar reference to the institution in the first half-century I have called it a medical college, and a medical school in the second half-century. In reference to the entire history I have called it a medical school or school of medicine. At times the word "institution," which includes both terms, is used to avoid repetition of terms in close proximity.

No one of the three rival regular medical institutions or of the several homeopathic institutions under ten different names complies with the cited definition of a medical school. Therefore these are familiarly designated as medical colleges.

I regret that space demands restriction of extensive biographical sketches to two groups, the founders and the deans. However, in the narrative chapters will be found brief biographical notes on all the ninety-seven men who have been professors, and of a

few men of lower rank who have had important responsibilities. The appendices give additional information about members of the teaching staff, and some statistical information.

The illustrations are restricted to buildings and portraits. The buildings are those of the medical college and some of the hospitals. Long search has failed to reveal any representation of the building in its original form, in which the work of the first two years of the medical college was conducted. This building, somewhat remodeled after 1860, is in use in 1944 as a retail store. The portraits are restricted to the founders, the deans, and a vice-dean.

When one writes of an institution with which he has been intimately connected during nearly forty years, he must, for historical completeness, occasionally mention his own name. Therefore, although I preferred to do otherwise, I have inserted my name in connection with some important events described in chapter XIII and chapter XV.

Aid in my search for material has been given by many libraries, some other institutions, and many persons, too many to be individually named. I am especially indebted to Dr. Lyon N. Richardson, Editor of the Western Reserve University Press, for extensive criticism of the manuscript, to the authorities of the university for providing the larger part of the expense in connection with preparing the manuscript, and to Dr. Roy W. Scott, who, as President of the Alumni Association in 1943, secured contributions from forty-five of the alumni and others sufficient with the aid of the university to guarantee publication. I appreciate the confidence of these forty-five men.

The collection of material and the writing of the manuscript have extended over many years. My compensation is in the hope that the friends of the institution will find an inspiration in its past to warrant the support of its work in the future.

Cleveland, February, 1944 FREDERICK CLAYTON WAITE

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BOOK I: PROLOGUE

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PIONEER MEDICAL EDUCATION

INASMUCH as education, however crude, must precede medical practice, medical education goes back as far as the nebulous history of medical practice, which begins with Imhotep—the first physician known by name—who practiced in Egypt about 2900 B.C. Institutions for teaching medicine existed in Egypt and Greece beginning about 600 B.C., the best known being the Akademia at Alexandria about 300 B.C. Similar institutions were conducted in the Roman Empire in the first two centuries of the Christian Era. A few arose in the Moslem world, but none in Christendom between 200 A.D. and 900 A.D. Then in the tenth century an institution for the teaching of medicine was founded at Salerno in Italy; medical teaching followed in several of the medieval universities of Europe, the more important being those at Bologna, Montpelier, Oxford, Paris, and Salamanca.

The history of a medical school during the century just past covers a period of revolutionary changes in medical education. Appreciation of these changes is facilitated by some knowledge of the development of medical teaching in the United States before 1843 and of the type of medical teaching prevalent one hundred years ago. The four chapters of Book I are devoted to this background.

Medical education and medical practice in the American colonies followed the pattern current in England, with some influence from Holland. In those countries, during the seventeenth century, relatively few students undertook the long program of medical instruction in the universities. Few English physicians held medical degrees, the majority having been educated under the apprenticeship system.

The better medical practitioners of the American colonies in the seventeenth century were also clergymen, because in that century in England the study of medicine was included in the study of theology. In the colonies men preached the Gospel and

practiced medicine at the same time, a relationship which Cotton Mather in 1698 termed "angelical conjunction."[1] Only a few British physicians with medical degrees came to the American colonies in the early part of the eighteenth century; how few is indicated by the record that in 1721 in Boston, the largest city in New England, only one practicing physician held a medical degree.[2]

In 1726 a medical faculty was organized in Edinburgh which gave a course shorter than that given at Oxford or Cambridge. This institution, and others that followed the same plan, attracted more medical students than had the English universities, and the result was an increase in the number of physicians in Great Britain who held medical degrees.

The Preceptorial System

The guild system of the crafts of medieval Europe included training in medicine, then designated as a craft. The one who supervised the training was called a master, and the youth whom he trained, an apprentice. The seven years of normal apprenticeship included the general education of the youth as well as his training in the special craft. Minor progressive changes developed in the apprenticeship system. Then in the American colonies, in the second half of the eighteenth century, a major change affected the system in the fields of law, medicine, and theology. The term of apprenticeship in these subjects was reduced from seven to three years, and the youth was expected to acquire his general education under direction of his parents before beginning professional study. He was, therefore, more mature when he made his choice of a profession.

This abbreviation differentiated the training in the crafts from that in the professions and brought a change in terminology. In professional education the word "master" was replaced by the word "preceptor," and "apprentice" by "student." This modified system of apprenticeship, generally in use in the United States in legal, medical, and theological education before 1800, was called the preceptorial system.

Inasmuch as over ninety per cent of American physicians for the two hundred years from 1620 to 1820 were educated as apprentices or under the preceptorial system, and far more than half of those in practice in 1843 had been so educated, it is pertinent to sketch the essentials of the system about 1840.

The contract or agreement was different in medicine from that in the crafts. In the crafts the parent or guardian entered into a contract with the master by which the master became *in loco parentis.* The youth was said to be "indentured" or "bound out." A runaway apprentice was subject to arrest by civil officers for return to his master. The indenture was often publicly recorded and could be terminated only by mutual consent of the two contracting parties or by order of a court of record. In the preceptorial system in medicine an agreement was drawn outlining the course of instruction and the mutual obligations of preceptor and student. At times the parent or guardian responsible for the preceptorial fee joined with the student, if he was a minor, in signing this agreement, which was not recorded and was revocable with reasonable ease. It covered a period of at least three years and did not terminate until the student became twenty-one years of age because, even though his period of study was completed, he could not legally practice medicine independently while he was a minor. The same length of course and minimum age of termination prevailed in preceptorial education in law. I have published elsewhere a typical medical preceptorial agreement of northern Ohio in the 'forties.[3]

The standard fee paid the preceptor was one hundred dollars a year, a sum modified more or less according to the preceptor's reputation for success. The student might reside with parents, relatives, or at a boarding house in the same town as the preceptor, or he might live in the family of the preceptor. In the latter case the student performed various duties not connected with his medical study, in return for his board and room, and these duties might be accepted for part of the preceptorial fee.

The student had no vacations. If instruction was interrupted

because of illness or other emergency affecting either preceptor or student, the date of termination of the course was advanced so that the full term of thirty-six months might be completed. The preceptor furnished the student books for study and gave him access to his library, including such medical journals as he might be receiving.

The course had several phases. The first was familiarly called "reading medicine with a doctor" and consisted of assignments in textbooks with recitations daily except Sunday. The early subjects were anatomy (including study of a skeleton), chemistry, and botany. Then came physiology, materia medica, and pharmacy. Finally clinical subjects were added to the readings and recitations. This phase continued throughout the three years of the course, with diminishing emphasis as other phases were attained.

The better preceptors considered human dissection essential, although animal dissection was often made to suffice. Human dissection was rarely mentioned in preceptorial agreements for fear that the document might be used as evidence of a premeditated illegal act. Material for this phase of the training was acquired by "resurrection" of a body recently interred in a country churchyard. It was taken to the hayloft or some outbuilding of the preceptor, where he and the student dissected it. The cleaned skeleton constituted the first item of equipment for the future career of the student. Human dissection was conducted with much secrecy and was not acknowledged if curious laymen made inquiry.

Pharmacies were found only in large cities; therefore the practicing physician had to prepare and furnish medicines for his patients for which he charged a fee in addition to the fee for professional services. The student was introduced to this part of his future work early in his training. He ground the crude drugs with mortar and pestle, prepared tinctures, measured dosages, made pills, and became skilled in the technique of wrapping "powders." Most medicaments were given to the patient in dry form. Because of the high cost of bottles and corks the liquid form was little used, and when it was, an additional

charge was made. The bottle, thoroughly cleaned, was returnable to the physician for credit, but not the cork.

Instruction of the student in the presence of patients also began early. In the office of the preceptor the student first watched, and later assisted in the examination of patients and in some phases of minor surgery, learning how to open abscesses, dress wounds, bandage fractures, extract teeth, and let blood. Phlebotomy was still practiced in 1840.

The next phase was known as "riding with the doctor." The student accompanied the preceptor on his calls and, sitting at the bedside, observed symptoms and listened to the elicitation of information from the patient. After leaving the patient the preceptor explained what had been seen and heard and gave his reasons for the treatment administered. In the later months of his course the student made unaccompanied calls on convalescent patients.

Occasionally there was opportunity to assist at a major surgical operation, usually an amputation; laparotomies were rare. "Assistance" was sometimes more of physical than professional participation, for this was before complete anesthesia was used and the duty of the student lay in physical restraint of the patient during the operation.

The patients seen by students were almost exclusively men and children. Public opinion precluded admission of a student to the sick room of adolescent or adult white women. Therefore study of gynecology and obstetrics was restricted to study of books and instruction by the preceptor. Many physicians had never seen or assisted in an obstetrical delivery before entering practice, and their early efforts lacked skill; this was one reason why midwives were preferred by many.

The student in a slave state had better opportunity for practical instruction in obstetrics. Medical students were permitted to observe, assist in, and finally make deliveries of slave women, and of negro women in the northern states.

At the end of the term of three years the preceptor, if he could conscientiously do so, issued a certificate of proficiency stating that his student had been under instruction for three years and

was competent to practice medicine independently—"to ride alone." When this certificate was recorded with a town clerk or probate judge its holder became a legal practitioner within the jurisdiction of that officer.

If the young physician so desired he might obtain the license of a medical society by the method to be described in chapter III. This increased his prestige, which was further enhanced if he was admitted as a member of a medical society.

The preceptorial system had some elaborations. Occasionally —though rarely, because of public prejudice—an autopsy was seen. Some preceptors provided instruction in operative surgery on the cadaver; some gave instruction in the technique of obstetrical delivery by use of a manikin. In larger towns and cities the student might be taken to an almshouse, or asylum, or hospital to see types of disease not common in the private practice of his preceptor.

This system had many variable factors: the natural ability of the student, his previous education, his industry; the education and medical experience of the preceptor, his ability to teach, the extent and variety of his practice, the size and quality of his library, and his conscientiousness in attention given to the student. If these were all of high quality the result was an individual well trained in the art of medicine, except in gynecology and obstetrics, yet with little knowledge of medical science. But, in contrast, a preceptor of low ideals, limited education, meager experience, and little skill, might certify as competent one who was ill equipped for independent practice.

The lack of standardization was a weak link in the preceptorial system. Because there were no restrictions as to who might serve as a preceptor or who might be a medical student, the results at the end of the course of training showed all degrees of competency. This was somewhat remedied when medical societies specified the essentials of the program of instruction which should be completed before an applicant was admitted to examination by the censors of the societies.

It was natural that in the later months of his course, the student, or "young doctor," would be preferred by some pa-

tients to the preceptor, or "old doctor." However, competition was prevented by a clause in the agreement between preceptor and student in which the student pledged that at the end of his course he would not begin practice within a specified distance of the location of his preceptor.

Since preceptorial teaching was integrated with the institutional teaching of the Medical Department of Western Reserve College for over forty years, the advantages and weaknesses of the system need to be kept in mind as an endeavor is made to relate the events of this institution's first half-century.

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II

AMERICAN INSTITUTIONAL MEDICAL INSTRUCTION IN THE EIGHTEENTH CENTURY

As the population and wealth of the cities of the American colonies increased, more British physicians who had been graduated in medicine were attracted to them. These physicians gained prestige, both because their education was better than the average under the system of apprenticeship and because they possessed medical degrees. This stimulated desire in the young men of the colonies for similar advantages and resulted in an increase in the number who went to Europe for medical study —a custom which began in the middle of the seventeenth century.

The young men who went to Europe for medical study attended various medical institutions on the Continent and in Great Britain. Edinburgh attracted more Americans than any other place in the eighteenth century, 117 young men of American birth having been graduated there in medicine before 1801.[1]

The return of these Americans and the continued arrival of graduated physicians of British birth brought an increasing demand for medical instruction in American colleges. The first recorded official action was a resolution by the Board of Governors of King's College in New York in June 1763, stating that they proposed to establish medical teaching in that college as soon as their funds would permit.[2] It was inaugurated in a small way a year later, but the prelude had begun more than a hundred years earlier.

Early Public Teaching of Anatomy

A difficulty of the system of apprenticeship in medical education was inefficient teaching of anatomy because most dissection was illegal and public opinion disapproved of it. The person

whose body was dissected was considered to have suffered posthumous disgrace, inasmuch as dissection was legal only upon the bodies of arch criminals.

Laws appeared in Europe which gave to the king the disposal of the bodies of those executed for treason and later for murder. A king (e.g., Henry VIII of England), at times directed that such bodies be given to medical societies or universities for dissection. Yet later, disposition of the bodies of executed criminals was committed to the judge who imposed the sentence. This practice was found in the early colonies in America. The first published code of laws of the Massachusetts Bay Colony was the *Body of Liberties,* 1641. In it is a regulation that the body of an executed criminal be buried within twelve hours unless it was to be used for the teaching of anatomy.[3]

The early laws of some of the states provided that a judge, in sentencing to execution one guilty of certain crimes, might, at his discretion, add the further penalty that the body be given to a physician for dissection.[4]

These few legal dissections were usually made by a small group of physicians but in some cases were used in teaching students. The first recorded instance was at Ipswich, Massachusetts, where a dissection was made about 1642 by Giles Firmin, a clergyman-physician, with lectures over the dissected cadaver.[5]

Courses of lectures on anatomy were occasionally given: in New York City, in 1750,[6] in Philadelphia about 1752,[7] in Newport, Rhode Island, in each of the three years from 1754 to 1756,[8] and again in Philadelphia in 1762.[9] Similar courses in anatomy were probably given elsewhere of which no record has been preserved. All these were private enterprises; institutional medical teaching had not yet been begun.

Early Institutional Medical Teaching

The beginning of this was at King's College in New York City, where, following the approval by the Board of Governors in 1763, institutional medical teaching was inaugurated by Samuel Clossy, who had been graduated in medicine in 1755

at Trinity College, Dublin. While serving as Professor of Natural Philosophy of King's College, Dr. Clossy gave a course of lectures on anatomy in 1764. This is the first institutional medical instruction in the American colonies of which there is reliable evidence.[10] Certain contemporary statements have been interpreted to show that Giles Firmin gave lectures on medical subjects at Harvard College before 1650, but the evidence is not definite enough to establish priority.[11]

John Morgan was appointed Professor of Physic (medicine) in the College of Philadelphia in May, 1765. This is the first professorship in a medical subject in any college in the American colonies. Four months later William Shippen was appointed Professor of Anatomy.[12] In 1768, Adam Kuhn was appointed Professor of Botany, and in 1769, Benjamin Rush was appointed Professor of Chemistry. All four had been graduated in medicine at the University of Edinburgh.

The inauguration of medical teaching at King's College was less fragmentary. In August, 1767, six professors of medical subjects were appointed and teaching was begun on November 2, 1767, to a class of three students.[13]

In Great Britain, at this time, institutional medical instruction was conducted under two plans. The old, or English plan prevailed at the English universities. It required a degree of Bachelor of Arts to begin medical study; necessary because all instruction was in Latin. The degree of Bachelor of Medicine was awarded after attendance at three courses of lectures in different years, each extending through the university session of over forty weeks. Following an interval of seven years, the holder of a degree of Bachelor of Medicine, if he could show evidence of practice and further study, upon presentation of a thesis, was admitted to an examination which, if successfully sustained, brought the degree of Doctor of Medicine.

The new, or Scottish plan, in vogue at Edinburgh and also in Ireland, required less preliminary education. After attending three courses of lectures given in English, submitting a thesis, and passing examinations, the degree of Doctor of Medicine was granted as the initial degree.

Although all the professors of medical subjects at the College of Philadelphia and at King's College had been graduated at European institutions which gave the degree of Doctor of Medicine as the first medical degree, both of these American colleges adopted the plan of the initial degree of Bachelor of Medicine. Each of these institutions had been in existence as a college for ten years when medical instruction was begun and both were patterned after English universities and therefore tended to follow the English plan of medical degrees.

The first announcement of King's College in September, 1767 stated that the student enrolling for medical study should be a bachelor of arts, or be able to show by examination "a compleat [sic] knowledge of, at least, the Latin Language and of the necessary Branches of Natural Philosophy."[14] The general education required at the College of Philadelphia was essentially the same. At that time natural philosophy included all the natural sciences except astronomy, and was taught only in colleges of arts. Therefore a student would, ordinarily, have to attend a college of arts for at least a part of the course to acquire knowledge in this subject. This was less than the current requirement for a degree of Bachelor of Medicine in the English universities. The minimum interval between the baccalaureate and doctorate in medicine at the College of Philadelphia was three years; at King's College only one year. Both were much shorter than the interval of seven years in English universities.

The majority of practitioners, educated under the system of apprenticeship, were not enthusiastic over the inauguration of institutional medical teaching; neither were the better physicians who had been accustomed to serve as preceptors. In an attempt to secure the support of these men a composite of the English university program and the preceptorial system was adopted, under which the medical student was required to serve under a preceptor during three calendar years, except for the weeks spent in attending lectures, before he could secure a medical degree. The length of the lecture course was twenty-six weeks—one-half of the calendar year if no vacations were allowed.

Although attendance at three sessions of lectures was required before a degree was granted, two would suffice if, before enrolling for lectures, the student had served during three calendar years under a preceptor. This indicated that, in the opinion of those in control of institutional teaching, twenty-six weeks of lectures were equivalent to one hundred and fifty-six weeks under a preceptor—a disparagement of preceptorial teaching. With all these concessions, the initial institutional medical courses in America were shorter than those of the English universities, where the student attended three courses of instruction, each of forty weeks, before receiving the degree of Bachelor of Medicine.

Institutional medical instruction attracted few students for three major reasons: the high entrance requirements, the lack of support of the practitioners, and the unsatisfactory quality of the degree of Bachelor of Medicine, which did not make the recipient officially a doctor equipped to compete with graduates of European institutions who held the degree of Doctor of Medicine.

The Revolutionary War interrupted medical teaching both at the College of Philadelphia and at King's College, and soon after the war began both of them were suspended. Twenty medical students had attended King's College in eight years, of whom fourteen had received the degree of Bachelor of Medicine; two of these went on to the degree of Doctor of Medicine in course. At the College of Philadelphia, during the ten years when medical subjects were taught, twenty-nine men received the degree of Bachelor of Medicine, five later taking the degree of Doctor of Medicine in course. The results of institutional medical instruction before the Revolutionary War are not impressive—only forty-three graduates in ten years.[15]

Conditions After the War

The resumption of institutional medical instruction after the war was delayed both in New York City and at Philadelphia. The charter of the College of Philadelphia was annulled in 1779 because of a political controversy in Pennsylvania, and a

new institution was chartered under the name of the University of the State of Pennsylvania.[16] Professors of medical subjects were appointed, of whom all except one declined. Although only fragmentary medical instruction was in progress, the institution conferred degrees on the basis of examinations by men who were not members of its faculty.[17] In 1783 more medical professors accepted appointment and thereafter a complete medical course was given and degrees were conferred. The degree granted up to 1790 was Bachelor of Medicine. In 1789 the College of Philadelphia was partially revived, and during the next two years two institutions in that city were teaching medicine. The College of Philadelphia gave the degree of Doctor of Medicine as the initial degree in 1790, and in 1791 both institutions gave this degree.

In 1791 a charter for a new institution, named the University of Pennsylvania, was enacted, and the two former institutions went out of existence.[18] A medical faculty was appointed and in 1792 the University of Pennsylvania conferred its first degrees of Doctor of Medicine upon six men.

Columbia College in New York City was chartered in 1784 under a new plan supervised by a state department of education. In 1785 medical professors were appointed but they did not organize as a medical faculty nor give more than a partial medical course until 1791. The organization of a medical faculty in that year included appointment of a dean,[19] the first official use of the word "dean" that I have found in connection with medical teaching in the United States. This was also the first organized medical faculty with its own presiding officer. In all institutional medical teaching before 1791 the professors of medical subjects were members of a common faculty of arts, to which belonged professors of languages, mathematics, philosophy, and theology. The medical faculty of Columbia College continued active until 1811, when nearly all medical teaching was suspended, and in November 1813, Columbia College withdrew from medical education.[20]

Thomas Jefferson, when he became governor of Virginia in 1779, planned to expand the College of William and Mary into

a state university. This college of arts was reorganized into a series of "schools," each with a single professor, corresponding to what are now departments in colleges of arts. There were schools of ancient languages, mathematics, philosophy, and so on.[21] To these was added a school of anatomy, medicine, and chemistry. James McClurg, a graduate in medicine at Edinburgh, was appointed Professor of Anatomy and Medicine and continued to do some teaching in medical subjects until 1784.[22] No record exists that any men were graduated in course in medicine; one honorary medical degree was conferred.

Dr. Ezekiel Hersey, a practicing physician who was a graduate in arts of Harvard College in 1728, bequeathed £1,000 in 1770 to found a professorship of anatomy and surgery in that college.[23] This was the first endowment for medical teaching in America. The Revolutionary War restricted the educational activities of Harvard College and no effort was made to inaugurate medical teaching until 1782, when John Warren and Aaron Dexter were appointed to professorships of medical subjects; a few months later Benjamin Waterhouse was appointed. The medical department of Harvard College dates from 1783. This is on the authority of the first two medical professors to be appointed. In the archives of Harvard University is a memorandum written and signed by these two men in 1810, which opens with the phrase: "When the medical institution was established in this university in 1783. . . ." This date is also found in a circular issued in 1791 signed by the members of the faculty,[24] and in a petition to the legislature of 1816 signed by all the medical professors, including Dr. Warren and Dr. Dexter.[25]

At Harvard College the English plan was adopted and high requirements of general education were enforced.[26] Sixty-five per cent of the medical graduates at Harvard College in the eighteenth century held the degree of Bachelor of Arts. At King's College and Columbia College twenty-four per cent were Bachelors of Arts, at Dartmouth College, twenty-two per cent and in the institutions in Philadelphia, eighteen per cent.

The initial degree at Harvard College was Bachelor of Medicine. The degree of Doctor of Medicine could be acquired only

after an interval of seven years, though it was acquired at Philadelphia after three years and at New York after one year. The enforced requirement of general education was definitely higher and the requirement for the second degree more extensive at Cambridge than at either Philadelphia or New York.

In the organization of a medical faculty at Columbia College in 1791 dissension arose, and in 1792 a group of teachers seceded with intention of founding a rival institution. The seceding group, failing to secure from the officials of the State of New York the authority to grant medical degrees, sought to grant them through some institution which already had the power.[27] An arrangement was made with Queen's (now Rutgers) College, located in New Brunswick, New Jersey, to confer medical degrees upon recommended candidates. However, Queen's College appointed none of the medical teachers as professors and yet they called themselves the "Medical Faculty" of Queen's College..[28]

All previous institutional medical teaching in the American colonies and the United States had been in close geographical connection with a college arts, usually on the same campus and always in the same city. Here came geographical separation, historically important because it was a precedent followed many times in the nineteenth century when a group wishing to found a medical college, on failing to get an independent charter, resorted to the method of absentee landlordship in granting medical degrees. The method was also used in collegiate education. Between 1833 and 1846 Columbian College at Washington, District of Columbia, conferred over two hundred degrees of Bachelor of Arts upon students who had received all of their instruction in an institution in Hamilton, New York, that is now Colgate University.[29] The degree of Bachelor of Medicine was abandoned at Philadelphia after 1790 and in New York City after 1792.[30] Thus, in 1792, the degree of Bachelor of Medicine disappeared except at Harvard College.

In 1797 came an event that much influenced medical education in the nineteenth century. All institutional medical teaching until that year had been located in large cities, usually in

the largest city in the state. Dartmouth College was in the small village of Hanover, New Hampshire, and in this college of arts a department of medicine was established in 1797, with appointment the next year of Nathan Smith as Professor of Anatomy, Surgery, and Theory and Practice of Physic (medicine).[31] This was the first institutional medical teaching in a small country town and the precedent for many country medical colleges in the nineteenth century. Although the degree of Bachelor of Medicine had been abandoned everywhere except at Harvard College in 1792, Dartmouth College adopted the plan of two degrees.

The medical instruction at Dartmouth College was unusual in the size of the teaching staff. The only exception in the United States was that a lone medical professor had taught some subjects at the College of William and Mary from 1779 to 1784. Nathan Smith constituted the entire medical teaching staff at Dartmouth College for thirteen years, except when Lyman Spalding lectured on chemistry in two of the early years. This was not unprecedented; in the Middle Ages, in several European universities, the medical teaching was carried by one professor at a time for long periods—for over a hundred years at Cambridge University, until a professor of chemistry was appointed in 1703 and a professor of anatomy in 1707.[32]

Transylvania University, in Lexington, Kentucky, appointed two professors of medical subjects in 1799, and fragmentary medical teaching was begun in that year which continued with interruptions until 1817, when a full medical faculty was appointed.

Summary

Between 1764 and the close of the eighteenth century, institutional medical teaching was carried on under ten different chartered institutions in seven states (Appendix A). In 1800 four of these medical organizations were extinct, two (Queen's and Transylvania) were in suspension, to be revived in the nineteenth century, and medical teaching was in progress in only four places, namely, at Columbia, Dartmouth, and Harvard colleges, and at the University of Pennsylvania. Elsewhere I have

published a more extensive discussion of these ten early efforts in institutional medical education.[33]

Two of these organizations (Transylvania and William and Mary) conferred no medical degrees in course before 1801. In the eight others 321 medical degrees had been conferred, of which forty-six were honorary. The number of individuals receiving a medical degree in course was 257, of whom 149 received the degree of Bachelor of Medicine as the initial degree, and 108 the degree of Doctor of Medicine. Nineteen members of the first group took the doctorate after an interval, under the plan of two medical degrees.[34]

The first medical degree in the American colonies was conferred by the General Assembly of Rhode Island and Providence Plantations in 1663.[35] Two colleges which did not conduct medical instruction granted honorary medical degrees in the eighteenth century, and, in addition, the Connecticut State Medical Society, under unusual charter privileges, conferred the honorary degree of Doctor of Medicine on fourteen men in the last decade of that century.

When the number of individuals who received earned degrees is compared with instruction under ten charters in a period of thirty-six years the average of approximately seven graduates in course per year shows that American institutional medical teaching gained little headway in the eighteenth century. The interruption of the Revolutionary War was a factor, but the result was also influenced by the attempt to install in a country still in the pioneer stage the English system which pertained to a mature country. Moreover, in seeking causes one should not ignore the lack of approval of medical practitioners habituated to the system of apprenticeship as the sole method of medical education in the American colonies during a century and a half.

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III

THE RISE OF INDEPENDENT MEDICAL COLLEGES

INSTITUTIONAL medical education had been in every instance connected with a college of arts until 1807. Then arose a few medical colleges under direction of medical societies and with no relation to a college of arts. These were called "separate" medical colleges. Later many chartered institutions appeared under private ownership without oversight by a medical society. These were called "independent" medical colleges and later designated as "proprietary" medical colleges. The three adjectives separate, independent, and proprietary were often used interchangeably without regard to their technical differences.

A major reason for the limited success of institutional medical instruction in the eighteenth century was that two points of view were in conflict. Educators in the colleges of arts considered the science of medicine, as given in the lectures, the more important part, and felt that they had made a large concession when they permitted the medical student to spend one half of the calendar year with his preceptor. Physicians, on the other hand, believed that the main goal was the art of medicine which was learned under the preceptor, and they looked upon lectures as "theoretical" and of only supplementary value. These two theses were difficult to correlate under joint control in medical education.

The third period of medical education in the United States began in 1807. Whereas, in the initial period of one hundred and forty-five years, apprenticeship had been the only method of instruction, and in the second period of a little over forty years a few colleges of arts had added institutional medical instruction, in the third period medical education gradually came under control of the medical profession with little participation by educators from other fields. This change was originated by medical societies.

Early American Medical Societies

Although a few of the graduates of European medical institutions practicing in the American colonies were members of British medical societies, no medical societies arose in these colonies until well into the eighteenth century. The early societies were without interrelation; a few were in cities; there were occasional county societies; and one colonial society was founded in New Jersey in 1766 that was suspended in 1775.[1]

No legal standard of proficiency and no definite legal control of practice existed in the colonial period. As an example, the law in force in Massachusetts from 1649 until the state was organized in 1780, merely said: ". . . it is therefore ordered that no persons . . . employed as surgeons, midwives, or physicians shall presume to exercise or put forth any act contrary to the known approved rules of the art in each mystery or occupation . . . which law, nevertheless, is not intended to discourage all lawful use of their skill. . . ."[2] Anyone could practice medicine and many did so with little knowledge of the science or art of medicine. Every village had some individual who prepared and administered decoctions of herbs. The country was afflicted with itinerant quacks, who styled themselves "Indian doctors" and claimed to have secured the secret remedies of the Indians, for the Indians, because they were a robust race, were reputed to have much medical skill. However, the Indian shamans used incantations and sorcery more than medicaments in treating their sick.[3]

With the formation of state governments came efforts to establish a standard for entering medical practice by incorporating medical societies with power to license physicians. The Massachusetts Medical Society was incorporated in 1781 and was followed by similar organizations in six other states before 1800: in New Jersey in 1783; in Delaware in March 1789; in South Carolina in the autumn of 1789; in New Hampshire in 1791; in Connecticut in 1792; and in Maryland in 1799. Other states followed early in the nineteenth century. Inasmuch as direct rela-

tion of medical societies to medical colleges began in New York, the society of that state is taken as an example.

In 1806 the General Assembly of New York passed a bill incorporating the New York State Medical Society, and committed to it the responsibility for determining the fitness of individuals to begin the practice of medicine. Three component district societies were included: northern, southern, and western. Each district was composed of several counties, in some of which subordinate county societies were formed. Each district and county society established a board of examiners, called "censors." These censors examined any recommended applicant who had studied medicine for three years under a member of their own society, or under a member of another recognized society. If the applicant satisfied the censors, a certificate of the society was issued to him. The recording of this certificate with a civil officer within the jurisdiction of the society made the holder a legal practitioner in that area. The certificate of one district was readily endorsed, without further examination, by the censors of any other district society in the state; also, usually, in neighboring states. Thus early arose the plan of reciprocity in medical licensure.

These society certificates, replacing the preceptorial certificates of proficiency, were called diplomas, and one who held such a diploma was said to have been graduated by the society. The word "diploma," common in colleges of arts, is confusing here if the society plan of granting them is not known. No medical degrees were conferred directly by medical societies in New York. However, upon recommendation of the New York State Medical Society, the directors of the State Department of Education, known as the Regents of the University of the State of New York, might grant the honorary degree of Doctor of Medicine. Between 1792 and 1884 the regents conferred 246 honorary degrees in law, literature, philosophy, and medicine, of which number 186 were degrees of Doctor of Medicine.[4]

Inasmuch as the state authorities had committed to the medical societies the duty of determining whether a candidate had enough medical education to fit him for practice, the members

of the societies believed that they were capable of conducting this education in its institutional phase as well as in its preceptorial phase.

The First Two Separate Medical Colleges

In New York City, in 1792, an attempt had been made to establish medical teaching under a charter independent of any college of arts; an effort which failed because of the opposition of Columbia College. After the incorporation of the state and district medical societies in 1806, the Medical Society of the County of New York, the largest in the southern district, applied for a charter for a separate medical college, which was issued March 12, 1807. It made all 139 members of this society the trustees of the College of Physicians and Surgeons[5]—a marked contrast to the twenty-five to which the number of trustees was reduced in 1811.[6] At different times the phrases: "of the University of the State of New York," "of the Southern District of New York," and "of the City of New York" were appended to this name.

On April 3, 1807, the regents appointed five medical professors;[7] instruction began in November 1807, and the first graduates received their diplomas in 1811. The regents, instead of the trustees, conferred the degrees upon recommendation of the faculty. As long as the regents continued to appoint professors and confer degrees, the phrase "of the University of the State of New York" was appropriate.

The College of Physicians and Surgeons was separate from any other teaching body. The University of the State of New York was only an administrative body which conducted no teaching directly. This was the first separate medical college in the United States and introduced a new phase of medical education; a second separate medical college soon followed, in another state.

In 1789, a local medical society was organized in Baltimore, and one of its projects was to establish a medical college—an effort soon abandoned. In 1799 the General Assembly of Maryland incorporated the Medical and Chirurgical Faculty of Mary-

land, and gave it control of medical practice.[8] The word "faculty" was then used as a synonym of the word "profession" so that the name of this corporation meant a state society of the medical profession.

On December 18, 1807, the General Assembly of Maryland incorporated the regents of the College of Medicine of Maryland and named six professors, who, with the president of the state medical society and its twelve examiners, comprised the Board of Regents. Instruction began late in December, 1807, to seven students with the first graduated in 1812.[9] Here was a medical college absolutely controlled by physicians without overlordship of an administrative board of laymen, lawyers, and clergymen under the name of a university, as in New York.

When members of the medical profession came into control of these two separate medical colleges, they eliminated the three features to which they had objected in medical instruction in the colleges of arts in the latter part of the eighteenth century: a large amount of preliminary education, a long lecture term, and the system of two medical degrees. Their plan mentioned no general education required for entrance. The length of the lecture term was to be not less than four, nor more than six months. The early separate medical colleges started with a lecture term of four months; soon this was abbreviated to three months. This gave the student to the preceptor for two thirds, and soon for three fourths of the calendar year instead of for only one half the year, as in the early phase of the composite plan of medical education. The three lecture courses required before receiving the degree were reduced to two if the student had already studied under a preceptor for one calendar year. This gave more equal recognition to teaching by preceptors and by professors than was implied in the first announcement at King's College in 1767.

The initial degree was Doctor of Medicine, which spelled the final doom of the degree of Bachelor of Medicine, then still maintained at Dartmouth and Harvard colleges. In 1810 Harvard College abandoned this degree and conferred the honorary degree of Doctor of Medicine upon all its living bachelors of

medicine who had not taken the doctorate in course. In 1811 Dartmouth College also abandoned the degree of Bachelor of Medicine but did not follow Harvard College in granting honorary doctorates. In another place I have published a detailed history of the degree of Bachelor of Medicine in the American colonies and the United States.[10]

The separate medical schools endeavored to attract more students to institutional teaching, even though they had less general education and were given a briefer medical course. The number of students became the objective and the colleges of arts, which had tried to maintain the quality of medical teaching, were compelled by competition to reduce the requirements of preliminary education and the length of the lecture term in their medical departments to the level set by the separate medical colleges. Here, in 1807, began the decline in the quality of institutional medical education, which continued for many decades.

The Medical Institution of Yale College

A novel plan appeared in 1810 when a college of arts and a medical society joined in establishing and conducting a medical teaching institution.

In 1792 a charter had been granted for the Connecticut State Medical Society.[11] This charter is unique among all charters for medical societies in the United States in carrying the power to grant the degree of Doctor of Medicine, and between 1793 and 1814 this degree was conferred by this society in its own right upon thirty-seven individuals.

Following negotiations that had been begun in 1807 between Yale College and the Connecticut State Medical Society, a charter was granted in 1810 for the Medical Institution of Yale College;[12] this is the first time that the word "institution" was used in the official name of a chartered medical teaching organization. The word was again used in an official name in 1823 when, upon application of the Berkshire District Medical Society, medical teaching at Pittsfield, Massachusetts, was char-

tered as the Berkshire Medical Institution, with the provision that the degrees should be conferred by the trustees of Williams College, located forty miles away. This joint relation continued until 1837, when an independent charter was secured and the name changed to Berkshire Medical College.[13]

No action was taken at Yale College for more than a year. Meanwhile, in 1811, the Medical Department of Brown University was founded,[14] and medical institutional teaching was in progress in each of the three states that adjoined Connecticut. In 1811 and 1812 the trustees of Yale College appointed four active professors of medical subjects upon nomination of a committee composed of equal representation from the college and the Connecticut State Medical Society. Two of these professors represented the college and two the society. The examinations for the degrees were conducted by a committee with equal representation from the college and the society, plus an additional member from the society who acted as chairman and cast the deciding vote in case of a tie. Upon recommendation of this committee the trustees of Yale College conferred the degree of Doctor of Medicine.[15] Thus teaching was conducted and degrees were conferred by joint action of representatives under two charters where neither group had full control. This joint control continued, with some modifications, for seventy years.

In this arrangement the Connecticut State Medical Society pledged that it would discontinue the exercise of its chartered right to grant honorary medical degrees, yet for many years most of the honorary medical degrees conferred by Yale College were upon nominations made by the Connecticut State Medical Society. The society conferred no honorary degrees directly after 1814 until, in 1934, the ancient right was revived to confer an honorary degree of Doctor of Medicine upon an eminent physiological chemist. At the sesquicentennial of the society in 1942 two more honorary medical degrees were conferred.

Instruction in the Medical Institution of Yale College began in the autumn of 1812 and the first degrees were granted in 1814. The first matriculant was Jared Potter Kirtland, a member of the first faculty of the Medical Department of Western

Reserve College in 1843. Early in 1812, because of dissensions in the medical faculties in New York City, the arrangement of medical teachers in New York City and Queen's College, dormant since 1793, was revived with appointment of a medical faculty teaching in New York City.[16] This made three medical teaching organizations in that city and caused the closing of the Medical Department of Columbia College in 1813. When the institution in New Haven began instruction in the autumn of 1812, it had the competition of six chartered medical teaching organizations within a distance of a hundred and sixty miles. A considerable number of the practicing physicians of northern Ohio before 1843 had been students in the Medical Institution of Yale College.

The College of Physicians and Surgeons of the Western District of New York

In 1812 seven colleges of arts had medical departments, namely, Brown, Columbia, Dartmouth, Harvard, Pennsylvania, Queen's, and Yale, and there were two separate medical colleges, one in Baltimore, and one in New York City. In this year a second separate medical college was chartered in that state under control of the University of the State of New York, with the same conditions as in the college in New York City chartered in 1807, except that it had only twenty-four trustees. It was located in the village of Fairfield and was called the College of Physicians and Surgeons of the Western District of New York. This cumbersome name, necessary to distinguish it from the institution in New York City, was usually replaced by the familiar designation, "Fairfield Medical College." Four professors were appointed by the regents in December 1812: Josiah Noyes and George Cheyne Shattuck, both graduates in arts and in medicine at Dartmouth College; Lyman Spalding, a graduate in medicine at Harvard College, who had taught chemistry at Dartmouth College for two years when Dr. Noyes and Dr. Shattuck were students there; and Westel Willoughby, Jr., the leading practitioner in the region in which the medical college was located.

Dr. Willoughby had received the honorary degree of Doctor of Medicine from the regents of the University of the State of New York.

The founding was in connection with an academy established in 1803 in which Dr. Noyes and one other physician had taught medical subjects since 1809. Instruction under the charter of the College of Physicians and Surgeons of the Western District of New York began late in 1812, and the first students were graduated in 1816.[17]

This was the second medical college in a small village, and, with strong Dartmouth influence, followed closely the pattern of the first country medical college founded at that college fifteen years earlier. The "Fairfield Medical College" was successful and in the 'thirties had the third largest attendance in the United States, being exceeded in enrollment by only the medical departments of the University of Pennsylvania and of Transylvania University.

Many who studied medicine at Fairfield went to middle western states where they had much influence both in medical practice and in medical education. Former students at Fairfield participated in founding several medical colleges in the Middle West and this second country medical college became the pattern for country medical colleges throughout the United States. Four of the seven members of the first faculty of the Medical Department of Western Reserve College had been students or teachers at Fairfield.

Castleton Medical Academy

Before 1818 all medical teaching organizations had been subordinate to another body—to a college of arts, a state educational organization, a medical society, or to two of these, as was the situation at Yale College.

In 1818 appeared the first independent medical college, when three practicing physicians entered into an agreement to establish medical teaching under the name of Castleton Medical Academy. In this agreement they called themselves "proprietors." In later years it was usual to designate separate and

independent medical colleges as "proprietary." I believe that in the agreement of 1818 the word "proprietor" is used for the first time in connection with American medical education.[18] Moreover, here, for the first time in America, the word "academy" was used to designate a medical teaching organization.

The three men secured a charter by legislative enactment but, by an oversight, this charter did not carry the power to confer degrees. To be able to do this an affiliation was made in 1819 with the neighboring Middlebury College, a college of arts.[19] The original charter was soon amended, but the affiliation continued for eight years, during which time the proprietors boasted that theirs was the only medical college where degrees were conferred by the authority of two charters, a statement not strictly true because two charters were involved in the medical degrees granted at Yale College and at Williams College, although in somewhat different relations.

Instruction began in 1818 in the small village of Castleton in western Vermont, and the first degrees were granted in 1819. Under two changes of name this institution continued until 1861 and was attended by over three thousand persons, of whom 1,425 were graduated in course. Many of these went to middle western states to practice.

Increase in Number of Medical Colleges

In 1820, fifty-six years after the beginning of institutional medical instruction at King's College in 1764, such instruction had been carried on under eighteen different charters, counting that at New Haven and that at Castleton, in each case, as one. Thirteen of these organizations had been medical departments of colleges of arts; three were separate medical colleges, and two were independent medical colleges (Appendix A). Five of the medical departments of colleges of arts were extinct by 1820 and one was in suspension, so that the number of institutions actively engaged in medical teaching in 1820 was twelve, of which six had arisen in the past ten years. Ten of these were within three hundred miles of New York City.

From 1821 to 1830 twelve new institutions arose, six of them in connection with colleges of arts, one under joint control of a medical society and a college of arts, and five independent. In this decade, two medical departments of colleges of arts became extinct and the first cult medical college appeared, presaging a large increase in the next fifty years of the lowest grade of medical colleges.

In the fourth decade came nineteen new medical institutions, six in connection with colleges of arts and thirteen independent, including six more cult colleges.

In the two years 1841 and 1842, four more institutions were founded, half of them independent, so that before 1843, when the Medical Department of Western Reserve College was founded, fifty-four organizations chartered for teaching medicine had arisen in the United States—thirty-six of them in the preceding twenty years. Seven of the medical departments of colleges of arts had become extinct, and three such had severed their relations and become independent medical colleges. One separate medical college had become the department of a university. Only one of the independent medical colleges had succumbed. Another had merged with a rival independent college, and three were in suspension in 1843, but revived later. At the beginning of 1843, thirty-eight medical teaching organizations were in operation, twenty of them nominally medical departments of colleges of arts and eighteen independent, of which latter group five were cult colleges. However, in several of the so-called universities only the medical department was in operation and was, in fact, an independent medical college. When this is taken into consideration, the independent medical colleges exceeded in number the institutions connected with active colleges of arts and the independent type was coming to be dominant in American medical education (Appendix A).

Of the thirty-eight medical colleges and departments in existence in 1843, eighteen are now extinct and have no legal successors. Therefore, in 1943, there are but twenty medical schools in the United States that are older than the School of Medicine of Western Reserve University.

Nomenclature of Medical Teaching Organization

When the first separate institutional medical teaching body was organized in 1807, it was officially named a medical college. Four organizations between 1818 and 1835 were called academies. Before 1843 one of these was extinct and the three others had changed their official names to colleges, and all separate and independent organizations were officially named colleges except the Louisville (Kentucky) Medical Institute.

The terminology of medical teaching under the charter of a college of arts was less precise. In the eighteenth century the term "medical school" was frequently used, but it is now misleading because the present implication is of a separate medical faculty with its own presiding officer. The professors of medical subjects were members of a common faculty of arts. The term "medical professorship," then sometimes used, better defines the relation before several professors of medical subjects were detached from the common faculty of arts and organized as a separate medical faculty, with its own presiding officer who was called a "dean." The first record that I have found of this was in 1791. Such a separate medical faculty did not exist in some institutions until many years later—at Harvard College in 1816,[20] and at Dartmouth in 1836.[21]

"Medical department" began to be used shortly before 1800 to mean medical teaching under a college of arts. This term gradually displaced others so that when the organization for teaching medicine in Cleveland was officially named "The Medical Department of Western Reserve College," the name conformed to the accepted nomenclature of the time.

After the Civil War the colleges of arts increased the size of their faculties and the word "department" came to be used for each of the several major divisions of the undergraduate curriculum. The use of the same word for a division in the undergraduate college, like mathematics, and for the work of a separate medical faculty was confusing; the confusion was increased when the divisions under the medical faculty were also called "departments."

A change of terminology began at the end of the nineteenth century when the designation of "medical department" began to be changed to "medical school" or "school of medicine." In this a precedent existed in the name of Harvard Medical School, which had retained the early terminology for more than a century, and also in the name of The Johns Hopkins Medical School, then recently established. This change in terminology from "department" to "school" spread, and at the present time fifty of the seventy-six institutions teaching medicine in the United States are officially "schools," twenty-five are "colleges," and only one, The University of Virginia, clings to the nineteenth century designation of "department."

Nomenclature was not as simple as appears from the fact that by 1840 practically all official names were in one of two groups. Names showing location are appealing, for people know more of geography than of biography, and an institution whose official name commemorates some philanthropist is often called by the name of the town of location. In the literature of the eighteenth century, and even well into the nineteenth century, there are many references to "Cambridge College," "New Haven College," and "Hanover College," when the writer meant Harvard, Yale, or Dartmouth.

Similarly, many medical institutions were given secondary place names which were more used than the official names. In 1815, the Medical Department of Harvard College, five years after removal from Cambridge to Boston, began to use the name Massachusetts Medical College.[22] A few of these place names were justified by the cumbersome official names, as in the case of the College of Physicians and Surgeons of the Western District of New York located at Fairfield, Herkimer County, which was usually known as "Fairfield Medical College" and occasionally as "Herkimer Medical College." Two subordinate place names were used for several institutions. The Medical Department of Bowdoin College, located in Brunswick, Maine, was called both "Maine Medical College" and "Brunswick Medical College." Some institutions, that had the name of the state of location in the official name, used a secondary place name of the town of location. The Medical Department of the Univer-

sity of Vermont, located in Burlington, was often called "Burlington Medical College" and the Medical College of Ohio, located in Cincinnati, was called the "Cincinnati Medical College." After a rival arose in the same city in 1834, with the official name of "Cincinnati Medical College," one is uncertain which institution is meant.

Secondary place names became more confusing when writers called an institution by the name of the street upon which its building was located, as was done for several medical colleges located in cities. The Medical Department of Western Reserve College, after rival institutions arose in Cleveland, was referred to as "Erie Street Medical College" by some local writers.

The acme of confusion came when writers designated an institution by the name of some prominent member of its faculty, especially if that member were accustomed to change his allegiance from time to time. A reference to "Drake's Medical College" in Cincinnati required an exact date to identify the institution that is meant, because Daniel Drake was a member of the faculty of four medical colleges in that city at different times.

When, in 1843, the faculty adopted for the Medical Department of Western Reserve College the secondary place name of "Cleveland Medical College" it followed a prevalent custom. Occasionally the name "Hudson Medical College" was used, because Western Reserve College was located in the town of that name, even though no medical teaching was done in Hudson.

Those who have written about physicians and medical education of the nineteenth century have made many errors arising from unfamiliarity with the confusing synonomy of nineteenth century medical institutions. Some of these errors occur in the alumni catalogues of leading universities and in medical directories.

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IV

MEDICAL EDUCATION IN OHIO BEFORE 1843

DIVERGENT CLAIMS to territory within the present state of Ohio, based on colonial charters, brought the settlers of Ohio from three regions of the East. The early settlement of the southern third of the state was from Maryland and Virginia, with the exception of an area near Marietta, which was settled from New England. The central part of the state was settled mainly from Pennsylvania by Scotch-Irish, Pennsylvania Germans, and a few Quakers. The northern third of the state was settled chiefly from New England and upstate New York.

Nearly all the physicians who came with these migrations were young men trained under the preceptorial system and with little experience in medical practice. The few men who had attended medical college and the older experienced practitioners of eastern states were not attracted by a pioneer community in the western wilderness. Therefore early Ohio had few physicians experienced in teaching students, and preceptorial training was less efficient than in the older states. The great majority of the young men of Ohio who wished to study medicine before 1817 had to accept teaching under inexperienced preceptors because distance and cost prevented them from going to eastern medical colleges.

No adequate opportunity to secure an education in a medical college existed in the West until the Medical Department of Transylvania University, at Lexington, Kentucky, was effectively organized in 1817, following partial and interrupted medical teaching there since 1799 when two professors of medical subjects were appointed. A few students from southern Ohio attended at Lexington. The number who went to eastern medical colleges was small. Examination of the lists of enrolled students in all eastern medical colleges shows few students before 1825 who gave their residence as in Ohio, and as late as 1835 the total number of students from Ohio enrolled in all eastern

medical colleges was less than forty in any one year.[1] The first year in which a resident of Ohio was graduated in medicine at the University of Pennsylvania was 1820. Twenty-eight residents of Ohio were graduated in medicine there in the next twenty-five years, one-half of them in the last six of these years.[2]

The First Medical College in Ohio

The growth of Ohio was rapid in the first two decades of the nineteenth century. The population was estimated at 45,000 in 1800. The census of 1810 showed over 230,000 and that of 1820 over 561,000 inhabitants. The denser population was in the southern part of the state, with Cincinnati the largest city. That city had attracted a few well-educated physicians from the East, and in 1819 a group of these organized an independent medical college which was chartered as the Medical College of Ohio. The first graduates received degrees in 1821. Attendance was small and the total number of graduates in fifteen years was only 239, half of them in the last five of these years. This gave an average of twenty-four graduates a year from 1831 to 1835 from the only regular medical college in a state that had a population of 938,000 in 1830. Probably a somewhat larger number of individuals attended for a single session but did not remain long enough to secure a medical degree. Only a part of these graduates remained in Ohio for practice, and none went to northern Ohio. Attendance increased until in 1834 there were 110 students enrolled, in which year a rival medical college appeared in the same city.

Invasion by the Cults and the Second Medical College in Ohio

The second medical college in the state was related to a development in the treatment of the sick that had a large influence upon medical practice and medical education in Ohio.

Every pioneer region is much given to self-medication. Neighborhood medicine, with the use of native herbs, was extensive in the American colonies. Buchan's book on domestic medicine, first published in Edinburgh in 1768, soon reached

the colonies, and several editions[3] were published in the United States in the eighteenth century and many more editions in the early nineteenth century. The sales were extensive. This book was held in such esteem that it was kept on the parlor table beside the family Bible in many households. The habit of domestic medicine prepared the people for events that arose in medical practice early in the nineteenth century.

The first American medical cult appeared in the last decade of the eighteenth century, when Dr. Elisha Perkins, of Connecticut, introduced his metallic tractors, which he patented in 1796. This cult, known as Perkinism, was of short duration because of the death of Dr. Perkins from yellow fever in 1799 when he tried to stop an epidemic of that disease, prevalent in New York City, with a medicinal panacea that he had devised—a mixture of table salt and vinegar.[4]

A second cult arose in New Hampshire in 1808. Samuel Thomson, its promotor, named it Botanic Medicine; it was soon popularly called Thomsonianism. "This latter cult based its tenets on the not too brilliant observation, that all minerals are of the earth earthy and are in close proximity, even if they do not lead directly, to the grave; while plants shoot upwards from the soil and are emblems of light and happiness."[5] The basis was a book describing a few herbal remedies and their administration. The first edition was published in Boston in 1822; it was soon followed by a second edition in 1824 and a third in 1825.[6] In each copy the purchaser found a "diploma," giving him authority to practice this type of medicine, and also a certificate of membership in the Friendly Botanic Society. The treatment was the same for all ailments and consisted of three steps: emesis, evacuation by enemas, and sweating by steam baths—repeated until the patient recovered in spite of the treatment, or died. A feature of the regular medical treatment of that era was bloodletting, on the old and popular theory of depletion. Samuel Thomson condemned bleeding, but his treatment was more depleting than bloodletting. Samuel Thomson, who could neither read nor write when he founded his cult, decried all education, general or medical, saying that

education biased mental freedom, and claiming that the possession of his book was a full equipment for medical practice. However, he warned that the book would be of little effect if it were borrowed instead of being owned, a method of promoting sales of books used by an American cult of the present day. The promoter of this current cult also lived in New Hampshire.

Many people, accustomed to domestic medicine, readily accepted Thomsonianism. Samuel Thomson's book went through seventeen editions in about twenty years, and he claimed that 100,000 copies were sold at $20 a copy. Four editions were printed in Ohio, one of them in German to accommodate the Pennsylvania Germans. The immigrants brought Thomsonianism to Ohio, where it gained much support. The Thomsonians claimed in 1835 that one half of the inhabitants of Ohio were adherents of their system of practice, and regular physicians conceded a proportion of one third.[7] This extensive acceptance of cultism in Ohio before 1840 is an explanation of the fact that the state became a stronghold of sectarian medicine from 1845 to 1900.

A schism arose among the Thomsonians in 1825 when a group in the region of New York City formed a rival cult called Reformed Botanic Medicine. They organized the Reformed Botanic Society and began instruction in what they later called the Reformed Medical College of the City of New York.[8] Repeated efforts to get a charter in New York failed, and in 1830 the leaders of the group moved to Ohio, which by that time was the center of Thomsonianism. The two leading journals of the cult were published in Ohio, and the largest manufactory of its medicaments was in Cincinnati.

The Diocese of Ohio of the Episcopal Church had established Worthington College in 1819 in the village of Worthington, twelve miles north of Columbus. Although the college had suspended in 1822, its charter was still extant and its two-story brick building was unoccupied.[9] At Worthington, under the amended charter of this college of arts, the Reformed Medical College of Ohio, the Medical Department of Worthington Col-

lege was established. It was usually known by its secondary place name of Worthington Medical College. Instruction began in 1830 and continued until 1840. The largest attendance in any session was about forty and the total number of medical degrees conferred was over ninety, many of them honorary.[10] Accurate records have not been preserved. In 1840 the legislature repealed the amendment to the charter which permitted medical teaching under it.[11] Thus ended the second medical college in Ohio.

A botanico-medical college began instruction in Columbus in 1836. It was chartered in 1839 as the Literary and Botanico-Medical Institute of Ohio,[12] and was moved to Cincinnati in 1840. In 1838, in Cincinnati, was founded a Physico-Medical College which taught a related cult, and in the same city appeared in 1839 the American Medical College, which espoused yet another variety of Thomsonianism. The founding of four cult medical colleges in Ohio within nine years indicated the sorry condition of medicine in the state in the 'thirties (Appendix A). Several other cults had adherents and practitioners including the ancient uroscopy. The cult of hydropathy, organized by Priessnitz in Europe in 1840, soon reached Ohio with establishment of numerous water-cure sanitaria.

The Early Medical Societies of Ohio

Ohio was admitted to the Union in 1803. Seven years later the legislature enacted a law, effective January 14, 1811, which aimed to establish standards of medical practice. This law divided the state into five medical districts in each of which the legislature named three medical censors to conduct examinations and issue licenses to practice medicine. A year later the number of districts was increased to seven and the legislature named 120 physicians of the state to constitute the President and Fellows of the Medical Society of the State of Ohio. Numerous changes by legislative enactment followed, including an increase to twenty medical districts in 1824. This attempt at medical

organization by legislative initiative was of little effect, and in 1833 all medical laws were repealed.[13]

The attempted legislative type of organized medicine was succeeded by voluntary medical organization, with district medical societies and some county societies, each with a board of censors that examined candidates and issued licenses to practice. In 1846 the Ohio State Medical Society was formed with subordinate district and county societies.[14] Thus medical organization in Ohio, after many years of delay, followed the plan that was in operation in most of the eastern states before 1810.

The Medical Department of Willoughby University of Lake Erie

The northern third of the present state of Ohio was included within the colonial boundaries of Connecticut, and after the Revolutionary War that state retained the part of her former possessions located immediately west of Pennsylvania under the name of Connecticut's Western Reserve. The population of this area increased rapidly from 1800 to 1830. The settlers, who came in large part from New England and upstate New York, had little contact and little in common with the inhabitants of southern Ohio, who had come from Maryland and Virginia.

More physicians, some of whom had attended medical colleges in western New England and central New York, came with the increase of population of the Western Reserve. Few of these were graduates in medicine, and these few tended to go to the larger towns. Thirty-six licensed physicians were members of the Portage County Medical Society in 1831, of whom only five held the degree of Doctor of Medicine. Cleveland was the largest town in northern Ohio, and its first directory, published in 1837, lists twenty-four physicians, of whom only six held a medical degree.[15]

The beginning of institutional medical teaching in the Medical College of Ohio in 1819 brought suggestions from

physicians in northern Ohio that a medical college should be established in that part of the state in the not distant future. This growing opinion happened to fit in with another project in that region. The first railroad in the United States began operation in 1833 and stimulated projected railroads in all parts of the country. The promoters of one of these projects resided in Chagrin, a village twenty miles east of Cleveland, and they had a vision of their village as a metropolis, with the belief that this future metropolis should have an institution of higher education.

A resident of Chagrin was a member of the state legislature, and through his efforts the legislature enacted a bill on March 3, 1834 incorporating eleven citizens of Chagrin—four of them physicians—as the Willoughby University of Lake Erie.[16] This is a peculiar name for an institution to be located in the village of Chagrin, Cuyahoga County, and the fact merits explanation.

The settlers of Chagrin had come largely from central New York, where the Fairfield Medical College was located and was at the height of its fame in 1834. Of that college Dr. Westel Willoughby was the president and the oldest professor, with a reputation in practice and medical teaching that extended over all of central and western New York and through northern Ohio, Michigan, Indiana, and Illinois; in which states many of his former pupils were practicing medicine. The four physicians among the incorporators of the Willoughby University were all former students of Dr. Willoughby.

Inasmuch as the first unit of the new university was planned to be a medical college, it was believed that the name of Willoughby would gain the support of medical practitioners in the Middle West and thus attract students likely to be advised by them.

The issue of a charter for the Willoughby University of Lake Erie was a purely local enterprise and was a surprise to most of the inhabitants of the Western Reserve, many of whom disapproved because the incorporators and early trustees included no clergymen.

The civil authorities of the village of Chagrin changed the

name of the village to Willoughby in December 1834, six weeks after medical instruction began.

This was the first American medical college named for a physician. Later in the nineteenth century the names of physicians were commemorated in the official names of Rush, Starling, Toland, Beaumount, and Marion-Sims medical colleges as well as in several additional cult and sectarian medical teaching organizations. The choice of name was not entirely influenced by the expected prestige. Dr. Willoughby was at this time reputed to be wealthy and he was an old man with no living children. It was hoped that he would contribute generously to the establishment of the new institution named in his honor and possibly bequeath his fortune to it. He was informally offered the presidency before January 20, 1835 but declined.[17]

The incorporators organized as a Board of Trustees on July 31, 1834 and on August 16 employed Dr. John Cook Bennett, a practicing physician in central Ohio, as agent, and made him a member of the Board of Trustees. He was given power to select and organize a medical faculty. Another man was the president of the Board of Trustees and Dr. Bennett was made the president (chairman) of the medical faculty.[18] He signed himself "president" in published notices which the public took to mean that he was the president of the university. A year later the designation of the chairman of the medical faculty was changed from "president" to "dean" to avoid further confusion in the public mind. The Board of Trustees voted at a meeting on September 15, 1834 "that a Medical Department of the University be organized denominated the Medical College of Lake Erie."[19] This secondary place name was supplanted by that of Willoughby Medical College when the name of the town was changed in December 1834. Four professors and three adjunct professors were appointed. Some of them declined and were replaced by new appointees, and three additional appointments were made within six weeks; so when instruction began on November 3, 1834 there were nominally seven professors and three adjunct professors. One of these did no teaching in the first session although he did not resign.

Also on September 15 the Board of Trustees voted to organize a "male collegiate department," for which three professors were appointed, and a "female collegiate department." Neither of these collegiate departments ever began operation. On December 19, 1834 it was voted to organize a law department with two professors. In the autumn of 1835 two law students enrolled and a few lectures were given and then teaching of law was suspended.[20] Therefore the only active feature of Willoughby University was its medical department, and little reference is made to the university after 1835, all the emphasis being upon the medical college.

The Board of Trustees, in an effort to gain the support of the medical profession, elected forty physicians practicing in the Western Reserve and twenty practicing outside that area, as fellows, with "the privilege of inspecting the teaching departments and of having free access to the privileges of the Institution."[21] Less than a third of these sixty men were graduates in medicine. The designation of "fellow" was used at the College of Physicians and Surgeons of New York City from 1811 to 1847 and at some other eastern medical colleges.

However, the medical profession did not give its approval to the proposed new medical college. A medical convention of the physicians of the Western Reserve was held at Cleveland in May 1834, where a resolution was introduced approving the new teaching effort at Chagrin. It was overwhelmingly defeated, only the three members residing in Chagrin voting for it. A few weeks later the trustees of Western Reserve College were approached with the suggestion that that college establish a medical department, but after inquiry of the sentiments of the profession, these trustees decided that the time had not yet arrived when a medical college was necessary in northern Ohio.

Medical instruction in Willoughby University began on November 3, 1834 to about twenty-five students. The session extended for sixteen weeks. The teaching was conducted in the upper floors of a business block in the village of Chagrin. All of the teachers were medical practitioners. Eight of them were residents of northern Ohio, two of these of the village of Chagrin. Two of the professors lived in southern Michigan

and came for a few weeks to give their lectures and then returned home. The session was marked by much confusion because one professor charged with teaching two important subjects did not appear at all, and after waiting several weeks, other members of the staff attempted to teach his courses. Another professor did not appear until the session was half over. No one of the nine men who taught in this first session had prior experience in teaching in a medical college, and only two of them had been graduated by a medical college.

The lack of success in this first session was so great that in subsequent years the supporters of the institution did not count it as a session. This condition was a result in large part of the inexperience of the teachers and lack of leadership. It was accentuated by personal quarrels among the teachers. A commencement was announced in the newspapers, but no record has been found that it occurred nor that any men were graduated at the end of the first session.

The personality of Dr. Bennett, the "president" of the medical faculty, contributed to the confusion. He was a native of Massachusetts who was brought as a child to southern Ohio. He studied medicine there under a preceptor and practiced in several towns in Ohio from 1825 to 1838. He was a promotor rather than an educator. He applied to the trustees of Willoughby University at their organization meeting for employment as an agent to solicit funds and to organize a medical faculty. The trustees could have made little investigation of his past career or they would not have employed him. This career was unsavory both in personal and educational relations. He had deserted his family, had been expelled from a medical society and from the Masonic fraternity, and had conducted the first medical diploma mill in the United States.

In January 1833, he with nine associates obtained from the Indiana legislature a charter for the non-sectarian Christian College to be located at New Albany, Indiana.[22] They immediately changed the name to Indiana University with Dr. Bennett as president, and although no instruction was ever given, conferred degrees of several kinds, some of an honorary

nature. The list included the degree of Doctor of Medicine[23] for which diplomas were sold throughout the Middle West and as far east as New York. This may be the source of the degrees of M.D. and LL.D. which Dr. Bennett appended to his name. A careful search of the lists of graduates of all medical colleges in the United States before 1833 does not reveal his name, and his career before 1833 certainly did not entitle him to the degree of Doctor of Laws from any reputable institution.

Dr. Bennett remained at Chagrin (Willoughby) for only a few months. A month after the close of the first session the trustees dismissed him. The trustees of Willoughby University dismissed three other professors besides Dr. Bennett and the three adjunct professors resigned. This left only three of the original faculty of ten, one being the man who gave no instruction in the first session. Three new professors were appointed. One was at the same time a professor at Fairfield Medical College, another a recent graduate of that college; the third man was a graduate in arts at Columbia College and in medicine at the College of Physicians and Surgeons of New York City. A president of the university, not a physician, was elected in 1836.[24]

Thus in 1835-36 the faculty had six professors, a number retained until 1843-44, when for a single year there were but four professors. In 1845 the number was increased to seven and in 1846 to eight. After 1834 only graduates of medical colleges were appointed to the faculty and these appointments included several men of long experience and wide reputation in medical teaching. Of seventeen men appointed on this faculty from 1834 to 1843 a majority had been connected, either as teachers or students, with the Fairfield Medical College, and that medical college was used as a pattern until it closed in 1841. After 1841 the relations of Willoughby Medical College were close with the Berkshire Medical College at Pittsfield, Massachusetts. Several men served on the faculties of both colleges in the same year, an arrangement made possible by the fact that the session at Willoughby was from November to March and that at Pittsfield from June to October.

In 1834 the Board of Trustees bought two acres of land in the center of the village and in 1836 erected a brick building sixty feet square and three and a half stories in height. The building was of adequate size and well equipped for a country medical college of that era. The cost of the building was met in part by local subscriptions with a few from a distance. Some money had to be borrowed to complete it. Among the distant subscribers was Dr. Westel Willoughby who also established a scholarship.

The Willoughby Medical College was successful after 1834-35 and gained both in esteem by the medical profession and in attendance. Dissension arose in 1841-42 and increased in 1842-43. Soon after the close of the session the president, a layman, resigned, and in July 1843 four of the six professors resigned; among them the dean of the medical faculty. Two of these vacancies were filled for the next session, the other two not until a year later. The teachers throughout at Willoughby were predominantly visiting professors, a plan usual in all country medical colleges.

At the end of the session of 1846-47 the medical department of the university was closed at Willoughby and moved to Columbus as a branch of the university. Instruction was .resumed in November 1847 under the name of the Willoughby Medical College at Columbus. In January 1848, before the first session at Columbus had been completed, the feature of the charter permitting medical teaching was annulled, and Starling Medical College, under a new charter, replaced the institution that had been brought from Willoughby.

The annual enrollment at Willoughby varied from twenty-five to 164. The first graduates were in 1835; the last in 1847. The total number of graduates in course in twelve classes was 160. In addition forty honorary medical degrees were conferred, so that Willoughby Medical College conferred exactly 200 medical degrees of Doctor of Medicine. Over 400 individuals attended at Willoughby who were not graduated there; fifty of these were graduated later at the Medical Department of Western Reserve College. Three fourths of the students

were residents of Ohio when they first enrolled; one eighth were from New York. The remaining one eighth included students from as far east as New Hampshire, as far south as Alabama, and as far west as Wisconsin; with a few from Canada West (now Ontario).

When the medical college was removed in 1847 the building was taken over by a female seminary (now Lake Erie College at Painesville) and was occupied until the building burned on March 4, 1856, one day more than twenty-two years from the date of the charter. Thus ended the last vestige of the first medical college in northern Ohio and the third in the state. In another place I have published an illustrated sketch of this institution, including the names of all trustees, officials, teachers, and graduates, with appropriate statistics.[25]

Some have held that the Medical Department of Western Reserve College was the successor of the Willoughby Medical College because a majority of the members of the first faculty organized in Cleveland in 1843 were men who had recently resigned at Willoughby. This deduction is invalid. The two medical institutions operated for four years as competitors only twenty miles apart. In 1847 all movable equipment was taken from Willoughby to Columbus and instruction resumed. Willoughby Medical College went out of existence when the part of its charter permitting medical instruction was surrendered in January 1848, and it had no legal successor. It was replaced by Starling Medical College, from which direct legal succession can be traced to the present College of Medicine of Ohio State University.

The early medical colleges of southern and central Ohio had little direct influence upon the Medical Department of Western Reserve College. The medical college at Willoughby was not only the first medical teaching institution in northern Ohio but it also had intimate relations to events connected with the founding of medical institutional instruction in Cleveland.

The background having been sketched in four introductory chapters, the main theme will now be begun.

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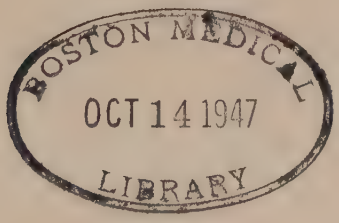
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BOOK II: FIRST HALF-CENTURY

V

FOUNDING OF THE MEDICAL DEPARTMENT OF WESTERN RESERVE COLLEGE

Western Reserve College was chartered February 7, 1826, and instruction began in October of that year. It was located at Hudson, twenty-six miles south of Cleveland. Indication of intention to develop professional teaching in law, medicine, and theology, in addition to offering work in the liberal arts, is found in the first printed appeal for funds, which was published in 1822.[1]

The charter gave power to conduct all types of education and confer all kinds of degrees. One of the trustees, in an address delivered when the cornerstone of the first building was laid in April 1826, said that the plans were to provide instruction to prepare students for all of the professions.[2] When it became public that the Willoughby University of Lake Erie would open a medical department in the autumn of 1834, the Board of Trustees of Western Reserve College, at an unofficial meeting attended by a large majority of the members on October 11, 1834, passed a resolution: "Resolved unanimously that it has been and still is the intention of the Board, when the interests of the community shall require it, to establish a Medical Department in connection with this College—that a correspondence be had with some of the physicians of the Reserve and adjacent places on the subject; and that such as feel an interest in it are hereby requested to communicate such view and feeling to Rev. Harvey Coe, Secretary of the Board."[3] The amendment to the charter in 1844 authorized the trustees to establish "the Medical Department contemplated by the act to which this is amendatory." The president of the college in 1845, in allusion to the Willoughby Medical College, wrote:

> The Trustees of Western Reserve College have the prior grants, are still in the field, and in a state of occupancy. And it has always been their

design, as well as their privilege, to establish a college with professional departments. The Theological Department is coeval with the college. In October 1834, when a counter movement was about to be made, they resolved and published "That it has been and still is the intention of this board, when the interests of the community shall require it, to establish a Medical Department in connection with this college, and that correspondence be had on the subject with physicians in the Reserve." The result of this correspondence was a general expression of opinion in favor of the measure, though some physicians expressed doubt whether the time had arrived for establishing the department. The trustees waited until they believed that the time had come, and that the interests of the community required the establishment. Its location in Cleveland was a matter of convenience; and they now contemplate it as having stability and permanence.[4]

These citations show that the establishment of the Medical Department of Western Reserve College in 1843 was not a hasty or unforeseen undertaking; it had been under consideration for more than twenty years.

As already stated, four of the six professors of the Willoughby Medical College resigned in July 1843.[5] They were: Horace A. Ackley, Professor of General and Special Anatomy and Physiology; John Lang Cassels, Professor of Chemistry and also Dean and Secretary of the medical faculty; John Delamater, Professor of Materia Medica, Pathological Anatomy, and Obstetrics; and Jared Potter Kirtland, Professor of Theory and Practice of Physic and of Physical Signs of Disease. Dr. Ackley and Dr. Cassels had been members of that faculty for eight years, Dr. Delamater for five years, and Dr. Kirtland for one year.

A Cleveland newspaper, late in May 1843, stated that arrangements were progressing rapidly to found a medical college in Cleveland under the charter of Western Reserve College.[6] After three of the four men had formally presented their resignations to the trustees of the Willoughby Medical College, an editorial in a Cleveland newspaper of mid-July announced that medical instruction would begin on the first Wednesday in November with a faculty of five: the four men named, and in addition Dr. Noah Worcester. It stated that "a splendid and commodius building has been obtained and every arrangement completed."[7]

Definite Action by the Trustees

The Board of Trustees of Western Reserve College, at the first business session of their annual meeting on August 4, 1843, received a communication from Dr. John Delamater—representing also Dr. Ackley, Dr. Cassels, and Dr. Kirtland—"asking some action of the Board on a proposition of the above named Gentlemen to deliver a course of Medical Lectures in the City of Cleveland and praying the Board to have such connection with the Gentlemen above named as to award the degree of M.D. on such candidates as they may recommend."

The charter of Western Reserve College provided: "That the said College shall be located in the township of Hudson, in the County of Portage. . . ." Some doubt existed as to the authority of the trustees to appoint professors to conduct instruction in Cleveland. However, a method derived from one used elsewhere was devised, and on the same day the trustees voted: ". . . Resolved, that J. P. Kirtland, M.D., John Delamater, M.D., David Long, M.D., George G. Baker, M.D., Samuel St. John, M.D., and Erastus Cushing, M.D., be and are hereby constituted a committee of examination to present to the Board the names of suitable candidates for the Degree of M.D."

Dr. Kirtland and Dr. Delamater were two of the petitioners. Dr. Long had attended the College of Physicians and Surgeons of New York City for one session in 1808-09; he had not remained for a second session to be graduated. He came to Cleveland in 1810 as its first resident physician and had practiced in that city for thirty-three years. He received the honorary degree of Doctor of Medicine from Willoughby Medical College in 1838. Dr. Baker was graduated in medicine at Bowdoin College in 1822 and had practiced in Norwalk, Ohio, since that year. Dr. St. John, Professor of Chemistry, Geology, and Mineralogy in the collegiate department of Western Reserve College at Hudson, was the only one of the six who was already an officer of the college. He had studied medicine in the United States

and in Europe and held the honorary degree of Doctor of Medicine from Vermont Medical College at Woodstock. Dr. Cushing had attended the College of Physicians and Surgeons of New York City during the session of 1822-23, and the next session he had attended the Berkshire Medical Institution at Pittsfield, Massachusetts, where he was graduated in 1824. He had also attended the Medical Department of the University of Pennsylvania during the session of 1834-35 and had practiced in Cleveland since October 1835. All the members of the committee were men of high standing in the medical profession.

This method of granting medical degrees on recommendation of an examining committee of which only a minority were officers of the college was not unprecedented. It had been used at the University of the State of Pennsylvania from 1779 to 1784. It had also been in use at the Medical Institution of Yale College since 1814. Inasmuch as Dr. Kirtland was named first on the examining committee, although Dr. Delamater had presented the petition, it is probable that Dr. Kirtland suggested the use at Western Reserve College of a method similar to that under which he had received his medical degree at the Medical Institution of Yale College in 1815. The committee selected Dr. Baker as its chairman.

In several eastern colleges of arts the baccalaureate degree was granted occasionally on examination to one who had never attended the institution conferring the degree. For a decade during this period, students who had been wholly instructed and examined by the faculty of an institution located at Hamilton, New York—now Colgate University—received their degrees of Bachelor of Arts from Columbian College, located at Washington, District of Columbia.[8] Since 1830 Western Reserve College had appointed annually an examining committee of six ministers and teachers of northern Ohio. This committee had joined with the faculty in examination of candidates for the degree of Bachelor of Arts and reported to the trustees. Thus general and local precedents existed for appointment of an examining committee to recommend candidates for the degree of Doctor of Medicine. The committee of the trustees that

reported the resolution to the Board of Trustees included two capable lawyers, both judges of courts. They clearly believed the method legal. This arrangement was satisfactory to prospective students; sixty-seven enrolled for the medical lectures that began November 1, 1843.

The authorities of Willoughby Medical College did not want a competitor within twenty miles, especially one that was to have as teachers the majority, and the best, of the professors who had been members of their own faculty a few months earlier. Such an organization was not only likely to enroll students who would attend at Willoughby if there were no other medical college in northern Ohio, but would also probably attract some of those who had attended at Willoughby. The fears of the Willoughby authorities were justified. Nearly half of the students who enrolled in the first session of medical teaching in Cleveland had previously attended at Willoughby.

The proposed method of granting degrees was published in late August.[9] The secretary of the Board of Trustees of Willoughby Medical College published a statement in the newspapers a few weeks later in which he attacked the new institution, questioned the legality of its degrees, and criticized some of its proposed teachers.[10] Dr. Ackley, Dr. Delamater, and Dr. Kirtland replied in a published joint statement.[11]

Amending the Charter

The records of the Board of Trustees of Western Reserve College for the meeting of August 1843 contain no intimation of intent to amend the charter. Although opinions of capable lawyers and editorial discussion in the newspapers supported the legality of the method, and also the students passed resolutions in a special meeting saying that they were satisfied with the legality of their expected degrees,[12] any question as to legality of degrees was likely to inhibit attendance in subsequent years. The Prudential Committee of the Board of Trustees, at its meeting of December 6, 1843, received a communication from the medical teachers in Cleveland asking that the charter be so amended as to clear up the uncertainty. Be-

cause there was no prospective meeting of the full Board of Trustees for several months in the future, the Prudential Committee approved the request and appointed a sub-committee to secure the needed legislative action.

The legislature was in session and one of the members of the House from Summit County, in which Hudson was located, was my uncle, Augustus E. Foot, a resident of Hudson. Mr. Foot was asked to introduce the necessary bill. It required two weeks to secure the signatures of the individual trustees to a petition and deliver it in Columbus.

Mr. Foot presented the petition of the trustees to the House on December 21, 1843. On the same day, John M. Gallagher, Speaker of the House, presented a petition from the medical teachers in Cleveland.[13] Mr. Foot introduced House Bill 42 on December 22, which was given its first reading, and on the next day given its second reading, and ordered printed, and sent to the Committee on Medical Colleges and Medical Societies.[14] Four of the five members of this committee were physicians. The Columbus correspondent of a Cleveland newspaper wrote in early January that petitions in support of the bill were coming in daily but no remonstrances.[15]

The original title and form of the bill referred to a legislative interpretation of the charter of Western Reserve College issued in 1826, to validate medical degrees given by the trustees of Western Reserve College for medical instruction in Cleveland. However, in committee this was amended, both as to title and content, so that it should specifically authorize establishment of a medical department in Cleveland. The bill was in committee over three weeks. Meanwhile opposition to it developed which led to a spirited contest between two groups not primarily interested in education.

As stated in the preceding chapter, many citizens of Willoughby were interested in a projected railroad. The same individual was the president of the Board of Trustees of Willoughby University of Lake Erie and the chairman of the Board of Directors of the railroad company. The promoters of several projected railroads in Ohio were seeking subsidies from the

state treasury and maintained a lobby during legislative sessions. Through the influence of the officers of the railroad project which was being promoted by the citizens of Willoughby, this lobby was directed to secure the defeat of the bill introduced by Mr. Foot.

However, another and larger political group existed in the membership of the legislature. The canals constructed in Ohio between 1825 and 1840 had been built with the help of state subsidies and were still partially sustained from this source in 1843. The promoters of the canals were opposed to granting subsidies to railroads which would be serious competitors, and besides, if subsidies were granted to railroads, it would be difficult to secure continuance of state aid to the canals. Anything that the railroad interests wanted was opposed by supporters of the canals, and the canal interests could be brought to support anything that the railroad interests opposed.

Dr. Jared Potter Kirtland, one of the medical teachers in Cleveland, had been a member of the legislature during three terms between 1828 and 1835, and he had been one of the most active members in securing state support for the canals. He was much in favor with the canal interests, and when it became known that the railroad promoters were going to try to defeat the bill introduced by Mr. Foot, Dr. Kirtland went to Columbus and speedily enlisted the canal interests in support of the bill. Dr. Kirtland remained in Columbus for a considerable part of the session.

Thus the simple matter of presenting a bill permitting a well-known college to extend its educational service, which under ordinary circumstances would have been speedily passed as a matter of routine, developed into a contest between these two great antagonistic transportation systems of that era.

When the bill was reported out on January 12, 1844 the opponents tried many methods to kill it.[16] The roll calls of yeas and nays show that nearly two thirds of the members of House supported it. After almost continuous debate for a week the bill was passed in the House on January 19 and sent to the Senate,[17] where it was referred to the Committee on Medical

Colleges and Universities, which kept it nearly three weeks and reported it out on February 7 with recommendation that it be given its third reading.[18]

The end of the session was approaching, and the opponents sought by various procedures to delay passage so that the bill would die with adjournment. First it was laid on the table, and when the friends of the bill succeeded after two weeks in calling it up, one entire day was consumed in repeated demands of the opponents for roll calls, one immediately following another, on the question of the presence of a quorum, which took precedence over all other action.[19] Finally it was made the order of the day. Then came proposals of a series of nullifying amendments, among them one to move Willoughby Medical College to Cleveland, and another to charter an independent medical college to be located in Cleveland.[20]

After two days of continuous debate the bill was passed by the Senate on February 21 by a vote of 24 to 11.[21] It was engrossed and signed by the Speakers on February 23, 1844, and thus became law.[22]

An Act to Amend an act entitled "an act to incorporate the Trustees of the Western Reserve College" passed February 7, 1826.

Sec. 1. Be it enacted by the General Assembly of the State of Ohio, That the trustees of Western Reserve College, shall be and hereby are authorized to establish the medical department, contemplated by the act of which this is amendatory, in the city of Cleveland, in the same manner, and with like power to confer degrees, and award diplomas, as though the same department had been established under said act hereby amended, at Hudson.

JOHN M. GALLAGHER
Speaker of the House of Representatives
THOMAS W. BARTLEY
Speaker of the Senate

February 23, 1844

It had taken over nine weeks to get this simple bill through the legislature. Its passage was only four days before adjournment and was three days after the first medical commencement exercises in Cleveland.

A newspaper correspondent who had attended the legislative sessions in Ohio for many years wrote: "Few measures of

a local character have ever been more strongly contested in their course through the legislature. I have rarely witnessed a local measure contested with so much zeal and ability."[23]

An examination of the many roll calls of yeas and nays on the bill, both in the House and in the Senate, shows that on every roll call the Speaker voted for the bill, and that all members from the Western Reserve continually supported the bill except the members from Lake County, in which the village of Willoughby was located.

The supporters representing counties and districts outside of the Western Reserve were nearly all from those counties and districts through which the canals passed, while the opponents were mostly from counties or districts that had no canals but through which some one of the many projected railroads was to pass.

In the midst of the contest a correspondent of a Cleveland newspaper predicted that the efforts of the "Railroad University" to defeat the bill would not succeed.[24] Because this was the major contest in that legislative session between the canal interests and the railroad interests, the newspapers of the state gave much space to the debate, incidentally advertising the new medical college. The Cleveland newspapers carried many columns, and one issue of one paper carried three columns on the final arguments for the bill.[25]

"Erecting" the Medical Department

The course of medical lectures which began on November 1, 1843 continued for sixteen weeks, the final days being occupied by examinations, and Commencement occurred on February 20, 1844. However, the Board of Trustees of Western Reserve College had not met to vote the medical degrees, the meeting having been delayed to await the outcome of the legislative contest. Therefore the degrees of the first graduating class were not granted at the end of the session; they were voted a month later.

A rule existed that two weeks must intervene between calling and convening a meeting of the Board of Trustees. President

Pierce was in the East soliciting subscriptions for the departments at Hudson. His expected return was awaited for two weeks and then the vice-president, on March 6, called the trustees to meet on March 19, 1844 in the session room of the Presbyterian Church at the corner of Ontario Street and the Public Square in Cleveland. At this meeting the Prudential Committee presented a report, containing twenty-four Articles of Establishment, which was unanimously adopted on the morning of March 20, 1844.

Articles of Establishment

Whereas by a recent act of the Legislature of the State of Ohio, the Trustees of the Western Reserve College are authorized to erect a Medical Department of said College in the City of Cleveland—Now therefore provided the requisite funds for carrying such purpose into effect be raised by the citizens of Cleveland, Resolved—

1st That said Department be erected in the City of Cleveland, under the style and title of the Medical Department of Western Reserve College

2nd That the Trustees of the Western Reserve College shall appoint a Board of Agency in Cleveland and vicinity consisting of *thirteen* who shall hold their office subject to the pleasure of the Trustees. This board shall be authorized to raise and appropriate funds for the provision of suitable buildings and apparatus for the use of the Medical Department of the College, and shall decide upon the location of said buildings, and have the general superintendence of the property belonging to said Department, and shall also be an advisory body to the Faculty and authorized to give them directions in case of emergency—under the supervision of the Trustees. Said Board shall annually report to the Trustees at their meeting at the Medical Commencement—

3rd That a Treasurer of this Department shall be appointed annually whose residence shall be in the City of Cleveland; who shall be authorized to receive, collect, and disburse all funds belonging to this Department, under the direction of the Board of Agency; who shall give bonds in the penal sum of Five Thousand Dollars with satisfactory sureties for the faithful discharge of his duties, with the further condition that he will at the expiration of his term of office transfer and convey to such person or persons as the Board of Agency may designate all the funds, and all property, real, personal, or mixed which he may then hold by virtue of his said office, and receive as a compensation for his services such sum as the Board of Agency may consider equitable, and shall appropriate to this subject—

4th That all funds raised for the benefit of this Department, shall be kept separate and distinct from all other funds of the College, and shall in no case be so managed as to involve any of such other funds—

5th The following Gentlemen are hereby appointed Professors and Lecturers in the Medical Department with their respective branches of instruction attached viz—

Jared P. Kirtland, M.D., Professor of the Theory and Practice of Physic.
John Delamater, M.D., Professor of Midwifery & Diseases of Women & Children.
Horace A. Ackley, M.D., Professor of Surgery.
John L. Cassels, M.D., Professor of Materia Medica, Pharmacy, & Botany.
Noah Worcester, M.D., Professor of General Pathology & Physical Diagnosis.
Samuel St. John, M.D., Professor of Chemistry & Medical Jurisprudence.
Jacob J. Delamater, M.D., Lecturer on Anatomy and Physiology.

6th Whenever a vacancy shall occur in the Department of General Pathology and Physical Diagnosis; these branches shall be merged in the other departments, and the Professorships with their incumbents shall be permanently reduced to six and shall be arranged as follows

1st Anatomy and Physiology
2nd Materia Medica, Pharmacy, and Botany
3rd Surgery
4th Theory and Practice and Physical Diagnosis
5th Chemistry and Medical Jurisprudence
6th Midwifery, Diseases of Women & Children, & Cutaneous Diseases

7th The Professors and Lecturers who fill the several chairs in the Medical Department shall constitute the Medical Faculty—and report to the Trustees the state of the Department at the Medical Commencement—

8th The Professors and Lecturers of the Medical Department filling the several chairs aforesaid shall receive their appointments from, and hold them at the pleasure of the Board of Trustees—

9th The Medical Faculty shall make such rules and regulations in relation to the admission of pupils, the terms and times of their attendance upon lectures, their examination and conduct, and all other necessary qualifications for graduation, as they shall judge proper, subject to the correction of the Board of Trustees—

10th The course of Medical Lectures shall commence annually on the first Wednesday in November and continue sixteen weeks—

11th Any persons who shall have complied with the requisitions for Degrees, and upon examination by the Medical Faculty in the presence of such censors, as may attend for that purpose, shall be found by a majority of them on joint vote duly qualified and entitled to the Degree of Doctor of Medicine, the Professors and Censors shall certify to the Board of Trustees—

12th The Medical Commencement shall be held annually in the City of Cleveland on the Wednesday following the close of the Medical Lecture term—

13th The Trustees shall hold a semi-annual meeting at Cleveland on the Tuesday preceding the Medical Commencement at 7 O'Clock P.M.; on which occasion the degree of M.D. shall be conferred on all such persons properly recommended, unless good and sufficient reasons shall appear why such degree should not be conferred—

14th Upon such degree being conferred, the Secretary of the Board of Trustees shall affix the Seal of the College to a proper diploma, which shall also be subscribed by the President of the College, the Secretary of the Board of Trustees, and by the Medical Faculty individually—

15th Each student who shall apply to be received as a pupil of the Medical Department, shall subscribe his name in a book kept for that purpose, and shall pay a matriculation fee of three dollars, which shall be appropriated to the contingent expenses of the Medical Department, under the direction of the Faculty of the same—

16th The fees for the attendance on a full public course of Medical Lectures shall be fixed at *Seventy-two Dollars*—and this sum shall be equally divided between the Professors and Lecturers of the Medical Department—it being understood that all apparatus necessary for illustrating the various departments of instruction shall be furnished by the Professors or Lecturer filling the same, until provision for such apparatus be made by the Board of Agency—

17th The total avails of the Lectures shall perpetually belong to the Professors and Lecturers in the Medical Department and the fees for attendance on the various courses of Lectures shall in no case be altered except with the consent of a majority of a full board of the Professors and Lecturers—

18th Every candidate for graduation before receiving his Diploma, shall pay to the Medical Faculty a graduation fee of *Twenty* dollars, Five Dollars of which shall be paid to the President for a proper Diploma, and the remainder shall be appropriated under direction of the Faculty to the general object of the Department—

19th The Board of Trustees shall appoint annually from the members of the Medical Profession such a number of censors as they may deem expedient—the number in no case however to exceed five—no two of whom shall be from the same County—Any Censor so appointed may be present at the examination of the candidates for degrees and shall have an equal voice with the Professors and Lecturers individually in deciding upon the qualifications of candidates for the degree of M.D.; any such candidate who shall have a majority of the votes of the Medical Faculty and the Censors who may be present, in his favor, shall be considered as having passed a successful examination, and shall thereupon be recommended to the Board of Trustees for said degree of M.D.—

20th In case any vacancy shall occur in the Board of Instruction in the Department in the interval of the meetings of the Board of Trustees—the Medical Faculty may temporarily supply said vacancy—

21st The Faculty of the Medical Department shall report as early as the fifteenth of December in each year to the President of the College; the names and residence of the students in said Department that they may be inserted in the annual Catalogue—

22nd The following Physicians are nominated as censors for the ensuing year—

Henry Manning, M.D., Trumbull Co.
Samuel Parsons, M.D., Franklin Co.

Friend Cook, M.D., Portage Co.
E. W. Hubbard, M.D., Lorain Co.
M. C. Sanders, M.D., Huron Co.

The Following Gentlemen are constituted the Board of Agency

Leonard Case	Saml Starkweather	W. J. Warner
P. M. Weddell	Zalmon Fitch	Thos Bolton
Philo Scovill	J. M. Woolsey	Wm. A. Otis
John W. Allen	Henry B. Paine	James M. Hoyt
	Madison Miller	

Charles Stetson is appointed Treasurer of the Board of Agency with power to call the first meeting of the Board at such time and place within the next seven days as he shall see fit—after their organization said Board shall hold their meeting in accordance with such regulations as they shall adopt—

23rd Resolved that the Board of Agency be directed in arranging the Medical buildings to provide suitable Rooms for the reception and display of objects of Natural History—

24th Resolved that the Recording Secretary of the Board of Trustees shall furnish from time to time, the Faculty and Board of Agency of the Medical Department with a certified copy of all proceedings of the Board which may relate to the Medical Branch of the college

Immediately following the adoption of the Articles of Establishment, and on the same day—which was exactly one month after Commencement—the trustees voted to confer the degree of Doctor of Medicine upon eighteen men "agreeable to the recommendation of the Examining Committee." This is evidence that the plan of the previous August was still considered legal and the recommendation of the examining committee was used instead of asking the faculty, just appointed, to make the recommendation. No record has been found that anyone contested the legality of these degrees.

Some of the Articles of Establishment merit comment. The securing of special funds to establish the Medical Department of Western Reserve College is made a condition of the authorization in the preamble. The collegiate and theological departments at Hudson were at this time under serious financial embarrassment, with insufficient income for their conduct and with a growing debt. Therefore the trustees were unwilling to assume any financial obligations for the medical department.

The Board of Agency, for which provision is made in the second article, was an enlargement of an accepted procedure

in educational administration of that era. Appointment of solicitors of funds was a universal practice in educational institutions during the first half of the nineteenth century. Such a solicitor was called an agent, and his duties an agency. In this case, instead of appointing a single agent to raise money to inaugurate the medical department, a board of thirteen was appointed. The size of this board was the same as that of the Board of Trustees which consisted of twelve elected members and the president *ex-officio*. The Board of Agency was in effect a subordinate Board of Trustees limited in its activities to financial matters and advice to the medical faculty.

The thirteen men who accepted appointment to the Board of Agency were leading business men, bankers, merchants, manufacturers, and lawyers of Cleveland, including the men of most wealth in that city. Five of them were college graduates. They were expected to contribute or secure the funds to buy a site, erect a building, and purchase the necessary furniture and equipment for medical teaching. The Board of Agency had its own treasurer so that its funds did not pass through the hands of the college treasurer at Hudson. Inasmuch as the Board of Agency was not a corporation, the title to the site and the medical buildings erected upon it, was vested in the Board of Trustees of Western Reserve College. However, the trustees did not claim title to the furniture and equipment which was considered to be the property of the Board of Agency.

The provision of the sixth article arose from the fact that Dr. Worcester was in frail health and was not expected to live long; he died in 1847.

The sixteenth article was in conformity with general practice in medical colleges of that time. Professors of medical subjects did not receive salaries but divided what remained of the income from student tuition after the general expense of maintenance had been paid. The method of doing this will be described in a later chapter.

The eighteenth article, allowing the president of the college a fee of five dollars for each diploma issued, conformed to tradition. In the early colonial colleges of arts the student bought

a piece of skin or parchment, employed a professional penman to engross it, and presented it to the president for signature. The president received a stated fee as a personal perquisite for signing. This practice resulted in lack of uniformity in diplomas of the same institution. Size, form, style, and often phraseology varied with the tastes of students and penmen. Therefore diplomas printed from an engraved plate came to replace those written by a penman. The president usually owned the plate personally, paid for the parchment, printing, and engrossing, and received the fee as a personal perquisite. The usual diploma fee for the baccalaureate degree was $4; for the master's degree and all professional degrees it was $5. Although no diploma fee was charged for most honorary degrees, it was customary for the recipient of an honorary degree to make a present to the president of an amount not less than the usual fee; often it was much more and furnished one of the supplementary incomes of that college officer.

However, in medical colleges it was a universal practice to charge a diploma fee for honorary degrees. In some institutions it was much as $100 and came near to the selling of a diploma. At the Medical Department of Western Reserve College the graduation fee for recipients of honorary degrees was the same as for degrees in course.

President Pierce had a plate engraved for medical diplomas at his personal expense. When he resigned in 1855 he sold this to the Board of Trustees rather than to his successor. However, the presidents received the customary diploma fee for medical degrees until 1884, when the Medical Department of Western Reserve College was transferred to Western Reserve University.

The Board of Censors

The nineteenth article provided for a Board of Censors of not more than five men. The committee on examination, appointed in August 1843, was popularly called a Board of Censors.

Appointment of censors was usual in medical colleges of

that time, and was derived from the system of censors in medical societies, who examined the candidates for licensure. That function of medical societies began soon after the Revolutionary War. The censors of the college joined with the faculty in the oral examinations of candidates for the medical degree and reported to the Board of Trustees. They also had the duty of annual inspection of the institutions.

The censors represented the practicing profession and especially the medical societies. Most of the censors when chosen were officers in a medical society. Participation in the examination for the degree by an officer, or past officer, of a medical society was usually accepted by that society as equivalent to examination by its own censors, and the graduate was granted a license without further examination. Later it became customary for any medical society to grant a license without examination to any one who held a diploma from a medical college that had a board of censors. Thus the plan of censors was essentially a system of granting licenses to practice medicine.

The physicians chosen as censors in Cleveland were in all cases men of high standing in the profession and active in the medical societies. They were mature men who had been accustomed to act as preceptors and were familiar with private medical teaching. The censors received no compensation; their traveling expenses were paid and also their hotel expenses during the several days of the oral examinations. These sums were paid from the amount received from the graduation fees of the students. Appointment as a censor in a reputable medical college was considered an honor and enhanced the reputation of the physician in the region in which he practiced. The fact of having been a censor was frequently mentioned in obituaries and biographical sketches of physicians.

In the Medical Department of Western Reserve College the censors were appointed annually by the trustees until 1858; after that year by the faculty. Most of the censors were practitioners in northern Ohio, which furnished the majority of the students, and in which area many of the graduates located for practice. However, a few were residents of western Pennsyl-

vania, whence came some students. A censor tended to send the students for whom he was preceptor to the medical college which he knew well by reason of being a censor of it. Thus selection of a popular preceptor in some distant county of the state as a censor was likely to increase the number of students coming from that county. Further discussion of censors will be found in chapter XV.

What Date Was the 100th Birthday?

For three quarters of a century no question was raised against the general acceptance of the year 1843 as the date of founding of the Medical Department of Western Reserve College. Then came a suggestion that 1844 was the more correct year because it was not until February 23, 1844 that an amendment to the charter was enacted that specifically authorized Western Reserve College to conduct medical teaching in Cleveland, and it was not until March 20 of that year that the convened trustees formally "erected" their medical department.

Although those who taught in the session of 1843-44 had not been formally appointed as teachers, three of them (Dr. John Delamater, Dr. Kirtland, and Dr. St. John) had been appointed as members of the examining committee and were therefore temporary officers of Western Reserve College in a capacity related to their medical teaching. The medical degree was conferred in March 1844 upon eighteen men who had received their instruction under these three men and under three others. There is no doubt that November 1, 1843 is the date of the first instruction, and instruction has continued to the present time without interruption except by the usual vacations.

One may ask what was the first legal action in the establishment of medical teaching by Western Reserve College. The appointment of the examining committee on August 4, 1843 was considered legal at the time, and its legality was not assailed except by officers of a competing institution.

The work of this committee was still considered legal when

the degrees of March 1844 were granted "agreeable to the recommendation of the examining committee," at a time when the medical faculty had already been appointed and could easily have made the recommendation had there been any doubt of the lagality of the other method. In the interval between August and March several eminent lawyers, some of them judges, gave their opinion that the method was legal.

The appointment of the examining committee was a recognition by the trustees of the proposed medical lectures. Therefore medical teaching to be recognized by conferring medical degrees was authorized, at least by inference, on August 4, 1843, and began on November 1, 1843. One of these two dates in 1943 marks the lapse of a century of uninterrupted activity of the present School of Medicine of Western Reserve University. I prefer the August date.

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VI

THE FOUNDERS

THE SEVEN MEN appointed to the medical faculty by the Board of Trustees in March 1844 have long been designated as the founders of the Medical Department of Western Reserve College, and they are here considered in order of seniority.

JOHN DELAMATER

Dr. Delamater was born April 18, 1787, the eldest son of a prosperous farmer of Chatham, New York, on the western slope of the Berkshire Hills. He was of the sixth generation of the Huguenot family in America, the ancestor coming from Holland to New Netherlands in 1652. .The earlier origin of the family was in Artois in France.[1]

The surname has many modifications of spelling and capitalization in America, such as dela Maistre, dela Matire, DeLa-Matre, DeLaMotter, DeLamatter, DeLaMater, and finally Delamater. I have seen the personal signature of John Delamater made in four of these forms before 1840. Although he had a French name, his ancestry through six generations was largely of Dutch blood and his portrait reminds one of the portraits of cultured Dutch burghers by Frans Hals in the art museum at Haarlem.

He was tutored in his youth by a scholarly clergyman, educated in Europe, who was skilled in the use of the English language. Dr. Delamater ascribed much of his success as a teacher to the training in written and spoken English that he received at this time. Dr. Oliver Wendell Holmes, who was his teaching colleague at Dartmouth College in the 'thirties, said of Dr. Delamater's lectures that they were "lucid as the water of a mountain spring."

Dr. Delamater as a youth wished to be a lawyer, and his parents wanted him to enter the ministry. They made a compromise on medicine, in which three of his uncles were engaged. In 1805, at the age of seventeen, he began medical study under

the preceptorship of an uncle, a prominent physician of Chatham, New York. He attended the first session of the College of Physicians and Surgeons of New York City in 1807-08 and was licensed by a medical society to practice medicine shortly before he was twenty-one years of age, and when twenty-one he was admitted to membership in another medical society, a rare occurrence for one so young, showing the early estimate of his ability.

He began practice in April 1808 with his preceptor at Chatham. He married in 1811 and moved to a small village in central New York, where he was joined by a younger brother, a graduate of the Medical Department of Queen's College in 1813. This brother died in 1814 and Dr. Delamater then moved to Albany, New York, where he practiced for a year.

He located at Sheffield, a town in the extreme southwestern corner of Massachusetts, late in 1815. He became a member of the Massachusetts Medical Society in 1816, and was one of the organizers of the Berkshire District Medical Society in 1819. He was twice vice-president of this society, and was also one of the twenty censors of the Massachusetts Medical Society.

The Berkshire District Medical Society, in cooperation with Williams College, founded the Berkshire Medical Institution at Pittsfield, Massachusetts, in 1823. Dr. Delamater had acquired a reputation as a successful preceptor, and, although he was not a graduate of a medical college, he was made one of the six original professors of the medical institution, teaching materia medica and pharmacy, to which obstetrics was added two years later. He received the honorary degree of Doctor of Medicine from Williams College at the end of his first session of teaching in 1824. Williams College conferred the degrees of the medical institution in its early years. He removed from Sheffield to Pittsfield in 1825, where he resided for two years. He resided in New York state from 1827 to 1840, when he moved to Willoughby, Ohio, and located in Cleveland in June 1842.

He began preceptorial teaching in 1815, and commenced institutional teaching in 1823, which he continued without interruption for thirty-eight years. He held professorships in

nine different medical colleges in Maine, Massachusetts, New Hampshire, New York, Ohio, and Illinois, the details of which are given in Appendix B. In nine of the years of his teaching career he held professorships in two different medical colleges in the same year, and in three other years he was a professor in three different medical colleges in the same year.[2]

This was possible under the plan then current under which different medical colleges held their sessions of three or four months at different seasons of the year, and also under another plan by which an individual might concentrate his teaching into less than the total number of weeks in the session by giving two lectures each day, permitting him to finish his course in one college and move on to another medical college to repeat the process. "Of the peripatetic professors, so frequent in the period of his life, John Delamater was one of the outstanding figures."[3]

Versatility was considered a criterion of excellence in the middle of the nineteenth century both in medical practice and in medical teaching, while limitation in either was deemed a mark of restricted ability. In the professorial titles of Dr. Delamater in nine medical colleges appear the following eleven subjects: medicine, surgery, obstetrics, materia medica, pharmacy, general pathology, pathological anatomy, physical diagnosis, diseases of children, diseases of the skin, and diseases of women. Medicine and surgery at that time contained many subjects that are now considered separate specialties.

The testimony of colleagues and students in many parts of the country was that he excelled in each subject that he taught. He conducted a private medical school during several months in each of several years, at Palmyra, New York, in addition to his teaching in chartered institutions. He taught all of the subjects of the medical curriculum in this private institution. His teaching in more than one medical college ended in 1843, yet for five years he continued to give a private course of medical lectures after the close of the regular session in Cleveland. "It has been said that he aided in the medical education of more young men than any man of his time and that he was the most versatile medical teacher in America. He gave over sev-

enty courses of lectures embracing every branch of medicine."[4]

Dr. Delamater was offered professorships in several medical colleges, which he declined. Among these were positions in medical colleges in New York City and in Philadelphia, which he refused because he was an advocate of the country medical college and personally did not like residence in a large city. "His versatility and his powers enabled him to teach with ability in any department and caused him to be sought by every institution whose corps of teachers might be imperfect."[5]

Dr. Delamater confined his teaching to New England and New York state until he came to the Willoughby Medical College in 1838. After that time he taught mainly in western medical colleges. No other medical teacher west of the Allegheny Mountains before the Civil War deserves comparison with Dr. Delamater except Daniel Drake, and Dr. Drake taught a fewer number of years, engaged little in peripatetic teaching, and was far less versatile. Dr. Delamater surpassed not alone in teaching. His reputation as a practitioner was equally extensive. The opinion of two prominent practitioners of his time shows the esteem in which he was held. A prominent citizen of Utica, New York, about 1835, consulted the eminent Dr. James Jackson, Professor of Medicine in Harvard Medical College, concerning a grave disorder. Dr. Jackson replied: "You have no need to write to me. You have Dr. Delamater near at hand, than whom there is no abler practitioner in the country."[6] Dr. Gustav Weber, a colleague on the medical faculty in Cleveland for several years, said that he had seen the work of many eminent physicians in Europe and America but that he had never seen the equal of John Delamater in clinical diagnosis. Dr. Delamater was especially skilled as an accoucheur. One of his early students, a prominent physician in Cleveland, alluded to this in a public address in 1885. He said: "Dr. Delamater was so well and favorably known that every man would take off his hat at the mention of his name and I am sure that every lady would take off her bonnet as a tribute to this great man's skill."[7]

Dr. Delamater joined the Ohio State Medical Society soon after its organization in 1846 and served on many important

committees, but declined to have his name presented as a candidate for any office of the society.

He had an extensive practice both in direct practice and as a consultant. He made little effort to collect his fees and was also "noted for unbounded charity." As a result he accumulated little for his old age. When he resigned from the medical faculty, he planned to go to a small village to live with a daughter to save expense. However, a few men who had long relied upon his medical skill bought for him a house in what was then East Cleveland, now East 102nd Street, rather than have him leave Cleveland. Here he spent his last years.[8]

Dr. Delamater was always a student, yet he published only a few articles in medical journals and no books. "He had an active and discriminative mind which led to philosophical reasoning and legitimate deductions." He had "a modesty and simplicity about him even more marked than his professional skill." He was enthusiastic in church work and through a great part of his life was either a deacon of the Congregational Church or an elder of the Presbyterian Church. His pastor said of him at his death that "his Christian character was above reproach."[9]

Dr. Delamater resigned from the medical faculty in 1861 at the age of seventy-four years, when his health became seriously impaired. He thereafter restricted his medical practice to serving a few of his old friends. The Board of Trustees of Western Reserve College conferred the honorary degree of Doctor of Laws upon him in 1860, and when he resigned he was made Professor Emeritus, the first time this title was used by this college.

Dr. Delamater died in Cleveland March 28, 1867, when nearly eighty years of age, honored by the medical profession and the entire community. His family included eight children. The elder son was a physician and teacher, the younger son a clergyman. Three of his six daughters married physicians. His wife and five of his daughters died before him. "Thus passed away, full of honors and years, one of the noblest men and most eminent practitioners of the age."[10]

Consideration of his administrative service is postponed to chapter XVIII.

Jared Potter Kirtland

Dr. Kirtland was born at Wallingford, Connecticut, November 10, 1793, the son of Turhand Kirtland, a builder of wagons and stage coaches.[11] The Kyrtland-Kirtland-Kirkland family, whose founding American ancestors came to Boston in 1640, furnished many prominent men, among them John Thorton Kirkland, President of Harvard College from 1810 to 1828.[12]

In 1799 Turhand Kirtland was appointed the general agent of the Connecticut Land Company to sell its lands in the Western Reserve, and in 1803 he removed to Ohio. The ten-year-old son was left with his maternal grandfather, Dr. Jared Potter, to be educated. Dr. Potter, a leading physician of central Connecticut, was much interested in natural history and engaged in fruit raising, including mulberries, with which he associated breeding of silk worms, an avocation popular in that region in the early nineteenth century. Jared Kirtland thus in his boyhood became associated with natural history and horticulture, things that much engaged him in later years. He was taught to observe accurately and record his observations conscientiously. When eleven years of age he was experimenting in budding and grafting fruit trees and studying the enemies of bees. At the age of twelve he discovered the new fact that the moth of the silk worm could reproduce by parthenogenesis, which was fifty years before Siebold published his work on this type of reproduction.[13] During these years the formal education of Jared Kirtland was directed, and at the age of seventeen he completed the course in a leading academy.

He then went to his father in Ohio, where he taught school. Dr. Jared Potter died a few months later and left to his grandson his medical library and money to enable him to study medicine. After a year of teaching in Ohio the young man returned to Connecticut and began the study of medicine under a preceptor with the plan of going to Edinburgh for medical study; this plan was frustrated by the outbreak of the war of 1812.

The Yale Medical Institution opened in 1812 and the name of Jared Potter Kirtland is the first on the matriculation book. After one session in that medical college he went to the Medical

Department of the University of Pennsylvania during one session, where he was taught by Caspar Wistar, Phillip Syng Physic, Benjamin Rush, and especially Benjamin Barton, eminent botanist, under whom Mr. Kirtland wrote a dissertation, his first published work.

He returned to New Haven, where he received attention from Eli Ives, Nathan Smith, and Benjamin Silliman, all former friends of his grandfather. He completed the medical course and was graduated by Yale Medical Institution in 1815. He had had extraordinary opportunities during eleven years under highly capable teachers of medicine and of several branches of natural science.

Dr. Kirtland returned to his native town for medical practice. The local estimate of him is shown by his election, at the age of twenty-five, as Judge of Probate, although he was not a candidate and at the time of the election was on a visit to his father in Ohio. He removed in 1821 to another town in Connecticut. Here his wife and one of his children died in 1823, causing much despondency, and he decided to abandon medical practice because he had been unable to save the lives of two members of his own family.

He went to Poland, Ohio, to assist his father, then in advanced years, in the conduct of a mercantile business, and he planned also to give attention to horticulture. However, a pioneer community demanded his medical service, and he resumed medical practice and continued the study of natural history. Here began a long series of observations and publications in zoology, which made him known to zoologists in America and Europe.[14]

In addition he entered public service. He was elected to the Ohio House of Representatives in 1827, and was twice reelected. He was made the chairman of the committee on the penitentiary, in which he instituted many reforms and was called the father of the new penitentiary. He was also active in promotion of building of canals.

The first geological survey of Ohio was organized in 1837, with Dr. Kirtland in charge of zoology, which resulted in sev-

eral extensive publications, especially upon birds and fishes.[15] At this time he removed from Poland to Rockport, a village near Cleveland.

His reputation as a scholarly physician brought his appointment in 1837 as Professor of Theory and Practice of Medicine in the Medical College of Ohio, then the leading medical college in the West. He filled this chair for five years.[16] During one year Dr. John Delamater was his colleague as Professor of Surgery. Dr. Delamater was also Professor of Medicine at the Willoughby Medical College and wished to add Dr. Kirtland to that faculty. To make room for him Dr. Delamater gave up his professorship of medicine and changed to the teaching of materia medica and obstetrics. Dr. Kirtland was elected to the professorship of medicine at Willoughby in 1841. However, he was unable to get his release at Cincinnati and did not feel that he could teach in two medical colleges in the same year in addition to carrying on his medical practice and his scientific and horticultural work. Therefore he began teaching at Willoughby with the session of 1842-43.

Dr. Kirtland was one of the four who resigned from the faculty of the Willoughby Medical College in July 1843. He taught theory and practice of medicine in the Medical Department of Western Reserve College for twenty-one years, from 1843 until he resigned from the medical faculty and gave up medical practice in 1864 at the age of seventy-one years, in order to devote himself to his scientific and horticultural work.

Dr. Kirtland was more widely known in Ohio than any other member when the original faculty was formed, and his name was placed first on the list of appointments by the trustees. His reputation as a scientist exceeded that of any other teacher in the medical college during its first half-century. In 1861 he received the honorary degree of Doctor of Laws from Williams College.

He was a skillful practitioner and an excellent teacher, but his reputation as a medical educator was overshadowed by his national fame as a horticulturist and floriculturist and his international repute as a zoologist. He was the first physician in

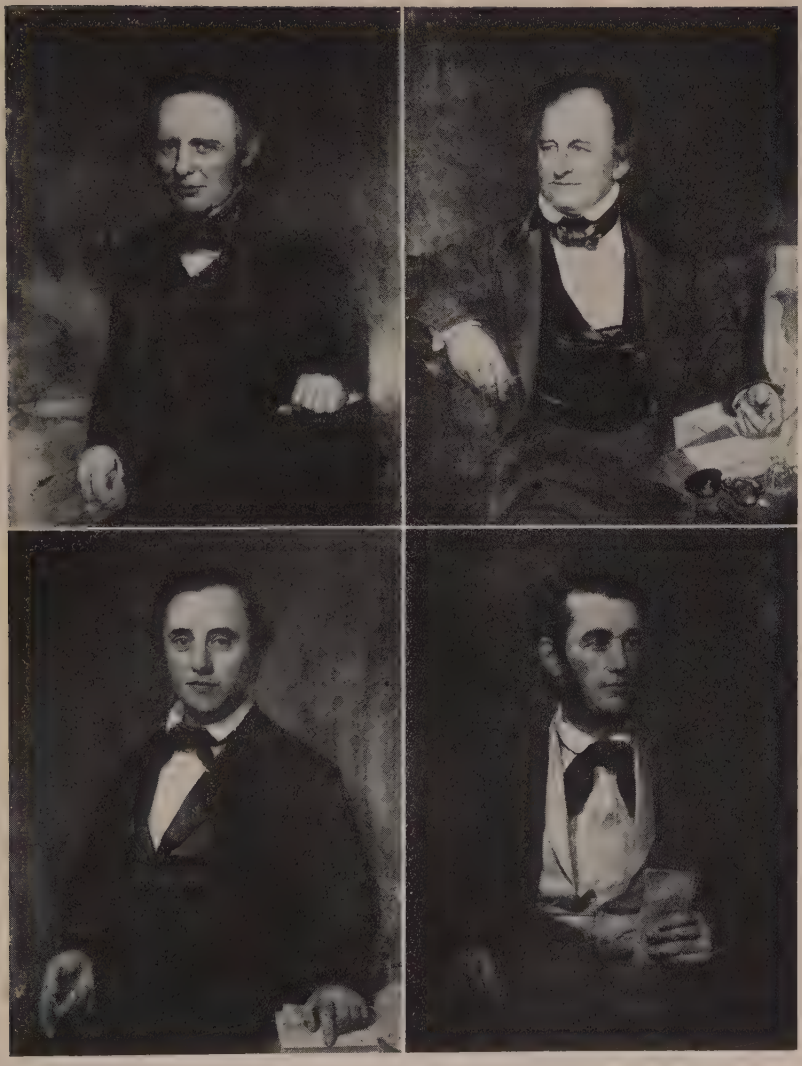
Cleveland to restrict his practice to consultation, publishing a newspaper notice to this effect in 1843.

He was active in organized medicine and was President of the Third Ohio Medical Convention in 1839 and of the Ohio State Medical Society in 1847—the second year of its existence. He was a member of many scientific societies, including the American Academy of Science and the American Philosophical Society—the societies of the élite of American scientists. He was a charter member of the American Association for the Advancement of Science. He was also an active or honorary member of many agricultural and horticultural societies, in several of which he held office.

He founded the Cleveland Academy of Natural Science in 1845 and was its president for twenty-nine years. This was soon called the Kirtland Society of Natural History and is now the Cleveland Museum of Natural History.

During twenty-seven years he was one of the editors of *The Family Visitor,* a Cleveland weekly newspaper. He was an extensive writer, recording his observations in over 200 published articles on botany, zoology, hygiene, meteorology, horticulture, floriculture, and medicine. His medical papers are not numerous but are all of high quality. He gave early attention to hygiene. In a report to the Ohio State Medical Society in 1851, he stated as his conviction that the source of typhoid fever lay in the drinking water, an opinion proved many years later. This opinion followed by two years the extensive epidemic of Asiatic cholera in northern Ohio, at which time Dr. Kirtland suggested that possibly the disease arose from contaminated water. When Cleveland came to take its water supply from Lake Erie, Dr. Kirtland was a member of the commission to locate the intake of the tunnel. He advocated that it be located west of the river mouth, where the prevailing winds would not carry the sewage contamination from the river to the intake. He finally carried his point against the opposition of engineers and contractors who wished to locate the intake east of the river mouth.

Dr. Kirtland had a commanding and dignified physique and yet a kindliness and simplicity that endeared him to all who



THE OLDER FOUNDERS

John Delamater
John Lang Cassells

Jared Potter Kirtland
Horace A. Ackley

knew him. Locally he was called "The Sage of Rockport." He rendered great service to American fruit culture in improving many fruits and originating new varieties. Because of his introduction of many new varieties of cherries he was known as "The Cherry King." The grape industry of northern Ohio originated with him.

His years after resignation from medical teaching were active. He made natural history explorations in western states and at the age of seventy-seven explored the Florida Everglades. He died at Rockport December 10, 1877, in his eighty-fifth year.

His was truly a great career as physician, judge, legislator, editor, author, horticulturist, and observational scientist. At his death an associate of forty years' standing said that the success of Dr. Kirtland was due to "untiring industry and an unextinguishable thirst for knowledge."

John Lang Cassels

Dr. Cassels was born near Stirling, Scotland, September 15, 1808. He attended the University of Glasgow for two years from 1824 to 1826, when he had to abandon his university course because of lack of money. In 1827 he came to Utica, New York, to join a brother, and taught school in that vicinity during the next three years.[17]

He began the study of medicine in 1830 and a year later entered the College of Physicians and Surgeons of the Western District of New York, at Fairfield, where he was enrolled for three sessions and was graduated in 1834. He resided in Fairfield with a relative who was the principal of Fairfield Academy. During the months when the medical college was not in session he studied chemistry under Dr. James Hadley, Professor of Chemistry in the medical college and a teacher in the academy, who was a renowned teacher of chemistry in several institutions in the early nineteenth century. Dr. Cassels was the demonstrator of anatomy during the last two sessions of his medical course. He remained in Fairfield for a year after graduation, serving as demonstrator of anatomy, studying chemistry, and also geology, mineralogy, and botany. Dr. Asa Gray, later a famous American

botanist, and a graduate of the medical college in 1831, was his teacher of botany.

Dr. Cassels began medical practice in a village in central New York in the spring of 1835. He was appointed Professor of Midwifery and Diseases of Women and Children in Willoughby Medical College in August 1835, and moved to Willoughby and began teaching in November. The teaching of chemistry was added to the duties of his professorship in December, when the professor of chemistry, a resident of an eastern state, failed to appear. Dr. Cassels was appointed Professor of Chemistry in the summer of 1836 and also Dean and Secretary of the Faculty. He continued to carry these duties until 1843. He was the most active man in the conduct of the Willoughby Medical College for seven years, and under his administration the institution reached the highest efficiency and reputation in its entire existence.

In 1837 he became the first assistant geologist of the New York Geological Survey and spent six months of each of the next three years in field work in New York state.

He was one of the four men who resigned from the faculty of Willoughby Medical College in the summer of 1843. In the first session in Cleveland in 1843-44 he was Professor of Chemistry, Materia Medica, and Pharmacy and was also Dean. When the faculty was formally organized by the trustees in March 1844, it became desirable to have one professor who was also a professor in the undergraduate college. The logical man was the professor of chemistry. Therefore Dr. Cassels relinquished the teaching of chemistry at the end of the first session to make way for Dr. St. John, and became Professor of Materia Medica, Pharmacy, and Botany. He occupied this position for twelve years until Dr. St. John resigned in 1856, when Dr. Cassels became Professor of Chemistry and Botany. In 1861 toxicology replaced botany in his title and under the designation of Professor of Chemistry and Toxicology he taught until his resignation in 1873.

He also had charge of the teaching of chemistry and natural history in the undergraduate department for twelve years from 1857 to 1869. He moved from Cleveland each year at the end

of the session of the medical college in March and taught at Hudson from March to July.

Dr. Cassels was well educated and a diligent student. He was considered an excellent teacher. His teaching career was continuous from 1827 to 1873 with the exception of the year 1830-31. He taught six years in New York, eight years at Willoughby, and thirty years at Cleveland, a total of forty-four years. During twelve years he also taught in the undergraduate department of Western Reserve College and during five other years at Lake Erie Seminary at Painesville.

His instruction was not confined to institutions. He gave the first public course of lectures on scientific subjects in Cleveland in 1839, and thereafter gave frequent courses of public lectures in Cleveland and many occasional lectures in other towns of northern Ohio.

His main activity outside of his teaching was as a chemist. When the new medical building was occupied in 1845 it contained his private laboratory, which he conducted for twenty-eight years. He gave attention to toxicology and was often called on as an expert witness in criminal trials. His work extended to food and water analysis, first of drinking water from wells. When Cleveland began to take its water from Lake Erie in the middle 'fifties Dr. Cassels made periodical examination of the water for potability and purity. This was confined to chemical analyses and detection of contamination by aquatic plants; bacteriology was then unknown.

As manufacturing increased in Cleveland he did much analysis of coal and other minerals. He was sent by Cleveland industrialists to explore states in the Mississippi Valley during the summer of 1845 seeking lead deposits.

A surveying party near the south shore of Lake Superior in September 1844 found remarkable variations of its compasses and seeking the cause discovered outcroppings of iron ore. In 1845 an explorer seeking copper and silver in that vicinity was told by an Indian guide of the discovery of iron ore the previous year, and this explorer located what was later known as the Jackson Mine.

As a result of the discovery of copper in that region, Dr.

Cassels was sent by a group of Cleveland men in the summer of 1846 to explore for copper on the south shore of Lake Superior. After arrival he learned from the Indians of the discovery of iron ore two years before. Dr. Cassels turned his efforts to seeking larger deposits of iron ore and found and took claim in the names of his employers to a square mile of land rich in iron ore and later known as Cleveland Mountain.[18]

The first ore was taken out of Cleveland Mountain in 1850. The first few hundred pounds of ore were shipped to the lower lakes in 1852, coming from Cleveland Mountain, and the first boat load of ore shipped to the lower lakes came from this deposit in 1853. The Sault Ste Marie Canal was completed in 1855, and the first boat load of ore to pass through the canal was from Cleveland Mountain and consigned to the Cleveland Iron Mining Company at Cleveland. It contained one hundred tons. This was the beginning of the iron industry of Cleveland. It was the discovery of Cleveland Mountain by Dr. Cassels that formed the basis of the great development of the iron and steel industry of Cleveland, and it was the knowledge and experience of Dr. Cassels that made this possible.

Dr. Cassels gave a public lecture in Cleveland after his return from Lake Superior in 1846, in which he described the region he had visited and predicted that it would become a great producer of iron, a statement received by his audience with incredulity. Dr. Cassels merits the title, along with a few industrialists of Cleveland who believed in his ability as a field geologist, of being one of the fathers of the iron and steel industry of Cleveland. He was the only one of the group who had sufficient knowledge of geology and mineralogy to find mineral deposits.

Dr. Cassels was held in high esteem by the citizens of Cleveland. His relations to industry, through his knowledge of chemistry, brought him into contact with the leading men of the city. It was he who persuaded one of them to endow the Hurlbut Professorship of Chemistry and Natural History in the undergraduate college in 1865. Endowment of medical education was then hardly known.

His genial manner gained him many friends and his reputation for integrity brought him into relation with public institutions, the first being appointment as a trustee of the Northern Ohio Insane Asylum in 1858. I have found no record that he practiced medicine in Cleveland, although he is occasionally recorded as a preceptor of a medical student.

His reputation as a scientist extended far, as is shown by his receiving the honorary degree of Doctor of Laws from Jefferson College in Mississippi in 1859. He was a member of several American scientific societies and a corresponding member of the Royal German Geological Society.[19]

Dr. Cassels continued his teaching and other activities until 1873, when he suffered a paralytic stroke and resigned from the medical faculty. His activities were much reduced in the following years, and he died in Cleveland June 11, 1879 at the age of seventy-one years. His extensive service in educational administration will be considered in chapter XVIII.

Horace A. Ackley

Dr. Ackley was born in Genesee County, New York, in the winter or spring of 1810, the son of a farmer. Extensive search has failed to discover the town or exact date of his birth, or the name which the initial "A." represents. The names of Aaron and Anson were common in the family. He had less formal education than any other one of the founders. He completed the course in an academy and at the age of twenty-one years began to study medicine under a preceptor at Rochester, New York, where he remained two years. He was a student in the College of Physicians and Surgeons of the Western District of New York at Fairfield during the session of 1833-34, but he did not receive a medical degree from that institution. Dr. John Delamater was one of his teachers and John Lang Cassels was a classmate.

Dr. Ackley was licensed and practiced during a few months in the spring of 1834 in Rochester, New York. He then went to Akron, Ohio, where he was in practice when appointed Professor of Anatomy and Physiology in the Willoughby Medical Col-

lege between September 15 and October 10, 1834. However, he did no teaching there in the session of 1834-35. In 1835 he moved to Toledo, Ohio, where he practiced until 1839, when he located in Cleveland.[20] On his arrival in Cleveland in May 1839, he published a notice in the local newspapers saying that he would restrict his practice to surgery; he was the first man in northern Ohio to do this.

Dr. Ackley began teaching in Willoughby Medical College at the beginning of the session of 1835-36 and continued to teach anatomy and physiology there during eight sessions. His former classmate, Dr. Cassels, joined the faculty at Willoughby at the same time, and three years later their former teacher, Dr. John Delamater, came to that faculty. These three men constituted half of the faculty, and the better half, from 1838 to 1842.

Dr. Ackley received the honorary degree of Doctor of Medicine in 1845 from Illinois College at Jacksonville, which then had a medical department. The records of this college make no mention of an earlier medical degree. However, the catalogues of Willoughby Medical College from 1836 to 1843, and the catalogues of the Medical Department of Western Reserve College in 1844, carry the designation M.D. after the name of Dr. Ackley. A careful search of the list of degrees conferred by nearly all American medical colleges prior to 1836 fails to reveal the name of Dr. Ackley. Therefore the source of his earlier medical degree has not been determined. A purely conjectural explanation is as follows: Dr. John Cook Bennett was the agent of the Board of Trustees of the Willoughby Medical College in 1834 when Dr. Ackley was appointed a professor, and probably made the arrangements with Dr. Ackley for appointment. It is possible that Dr. Bennett conferred upon Dr. Ackley one of the honorary medical degrees which he was distributing as President of Indiana University, to which reference has been made in a preceding chapter, in order to have Dr. Ackley's name appear in the catalogue with a medical degree.

Dr. John Delamater has been credited with initiation of the plan to found a medical college in Cleveland. This tradition

has continued during a hundred years. The records of the trustees of Willoughby University have been discovered recently. An entry in these records casts doubt upon this tradition.

The first public notice of intention to found a medical college in Cleveland appears in an item in a Cleveland newspaper shortly before April 26, 1843. On May 15 the trustees of Willoughby University held a meeting at which it was reported that Dr. Ackley would no longer teach at Willoughby, but that Dr. Kirtland probably would continue to teach. Dr. Cassels and Dr. Delamater were present at this meeting and Dr. Delamater assured the trustees that he would teach in the next session the subjects formerly taught by Dr. Ackley. Therefore three weeks after the first public notice of intention to found a medical college in Cleveland three of the four men who later resigned were still attached to the faculty at Willoughby. Dr. Ackley, alone, had decided to resign at that date.

The first circular of the Medical Department of Western Reserve College was issued in August 1843. It announced the list of teachers and the name of Dr. Ackley stands first on the list. The other names are not arranged in alphabetical order.

The sequence of events indicates that Dr. Ackley initiated the founding of the present School of Medicine of Western Reserve University. He was the most aggressive of the four men, and was the best known in Cleveland, having been in practice there for four years, while the three others had not been in that city so long. An editorial and obituary in the *Cleveland Plain Dealer* of April 24, 1859 stated that Dr. Ackley "was mainly instrumental in getting Willoughby Medical College to move to this city." This is equivalent to saying that he led in founding the Medical Department of Western Reserve College.

In the first session of the medical college in Cleveland, Dr. Ackley taught anatomy, physiology, and surgery. He was relieved of the teaching of anatomy and physiology by another man before the second session began and thereafter taught only surgery, which then contained all the subjects which are now surgical specialties.

Dr. Ackley was an able, forceful, and highly popular teacher.

One of his early students at Cleveland records that "he was a cold and skillful operator, a clear and impressive teacher, a man of marked and commanding personality." At the time of his resignation in 1856 a medical journal said of him: "Gifted with all the qualities of a great surgeon, he is bold and unflinching in his operations and has been untiring in his efforts to sustain a splendid surgical chair."[21] The cardinal principle of skillful surgery before the introduction of complete anesthesia was speed in operation; in this Dr. Ackley was renowned.

Many anecdotes about him and his teaching persisted in the medical college for fifty years. He was a diligent student and progressive. This is illustrated by the record that he began the use of ether in his private practice in January 1847, only three months after the first public demonstration of the use of "letheon" in Boston in October 1846. His use of ether was near the end of the session of the medical college. However, at the beginning of the next session in November 1847 he began to use complete anesthesia under ether in his operations before the medical students. He was certainly the first man to use ether in general operations in northern Ohio. Dr. Martin L. Wright and Dr. Benjamin Strickland advertised in Cleveland papers on January 30, 1847 that they would use ether in extraction of teeth. Both of these men restricted their practice to dentistry although both had studied medicine, Dr. Wright having been graduated in medicine at Cleveland in 1847 and Dr. Strickland elsewhere before 1835.

Dr. Ackley was reputed to be the most skillful surgeon in northern Ohio, and some said in all of Ohio. His reputation went far and lasted long, as is illustrated by a letter received from an inquiring prospective medical student resident in Tennessee, addressed to "Ackley's Medical College," in 1896, thirty-seven years after the death of Dr. Ackley.

Dr. Ackley was active in public welfare along medical lines. Two matters will illustrate this. The epidemic of Asiatic cholera of 1849 in northern Ohio was especially devastating in the town of Sandusky. Word reached Cleveland that all the physicians of Sandusky had fallen victims of the disease, and that scores ill

with the disease were without medical help. Within an hour Dr. Ackley had hitched his team to his buckboard, secured the necessary medicaments, and, taking two medical students, started for Sandusky. He drove the sixty miles without a stop except to water his horses. On arrival he took charge of the town, not only treating the patients, but burying the dead, procuring food from the frightened countryside and pouring lime on all effluvia. In two weeks he had stopped the occurrence of new cases, and during this time he did not remove his clothes, except to change his linen, nor sleep in a bed.

In the middle of the 'forties he began to plead for an insane asylum in northern Ohio, there being but one in the state, at Columbus. Finally in 1851 the legislature made appropriation for two more asylums, one for northern Ohio, and appointed Dr. Ackley chairman of a board of trustees to select a location and erect a building.

A location was chosen at Newburgh, now within the city of Cleveland. Dr. Ackley directed the erection of the original building, since replaced, and drew up the regulations for its management. He was the father of the Northern Ohio Insane Asylum.

An occurrence in connection with this activity illustrates his positive personality and forcefulness. The asylum building was nearing completion, and the funds, in charge of Dr. Ackley, had been deposited in a local bank. One morning the failure of the bank was announced. Dr. Ackley immediately went to the bank and demanded, not his personal funds which were also deposited there, but the funds for building the asylum. Upon refusal he swore out a writ of attachment and secured the sheriff and several deputies to serve it. The assignees refused to pay over any funds and then the deputies under Dr. Ackley's direction attacked the brick vault with sledge hammers, while the doctor threatened to shoot any man who interfered. Having knocked down the brick walls of the vault, they were about to attack the safes when the assignees capitulated and paid over all the asylum funds. Construction of the asylum was not interrupted and the courts refused to take any action against Dr.

Ackley for his violent methods in protecting the interests of over a hundred insane patients who awaited completion of the asylum to receive proper care.

Dr. Ackley was physically robust and intellectually alert, although somewhat crude in his ways at times. He had a good command of the English language, which he emphasized with considerable profanity, even in his lectures to students. This brought objections from some of the pious trustees of the college. However, when Dr. Ackley offered contributions to the collegiate and theological departments at Hudson they were quite willing to accept his liberal donations and thereafter ceased criticism of his language.

Dr. Ackley was active in organized medicine and was the president of the Ohio State Medical Society in 1852.

He was at the height of his success both in practice and teaching when he was subjected to a serious family sorrow in 1855 which much affected the few remaining years of his life. He lost interest in his teaching and resigned in February 1856, after twenty-one years of institutional teaching—eight at Willoughby and thirteen in Cleveland.

In the spring of 1859 he suffered an attack of pneumonia. He was convalescent and sitting in a chair in his bedroom talking to his professional partner, when he suddenly died on April 24, 1859, at the early age of forty-nine years.[22]

A medical journal said of him: "He was a self-made man. As a surgeon he was distinguished for his strength of judgment and the facility and success with which he operated."[23]

His was a brilliant career in which, with little formal education but with native ability, he rose by his own efforts to a distinguished position in education and practice, and his teaching had a lasting influence on the practice of surgery in northern Ohio during the next half century.

Noah Worcester

Dr. Worcester was born July 29, 1812 at Thornton, New Hampshire, the son of a teacher in secondary schools. He was graduated at Harvard College in 1832, being especially inter-

ested in chemistry, natural philosophy, and modern languages. He supported himself in college by teaching these subjects in a neighboring town, and also served one year as an assistant in chemistry.

He was the principal of an academy in Vermont for four years, from 1832 to 1836, during which time he studied medical textbooks. In the autumn of 1836 he entered the Medical Department of Dartmouth College. While studying medicine he supported himself by teaching private classes in French and Italian and also served as demonstrator of anatomy. He spent one summer in the naval hospital at Chelsea, Massachusetts.

After one session at Dartmouth he attended the Medical Department of Bowdoin College during one session, which was held at a different season of the year. Returning to Dartmouth, he was graduated in 1838 with the degree of Doctor of Medicine, and immediately became the partner in practice of Reuben Dimond Mussey, Dean of the Medical Department of Dartmouth College. A few months later Dr. Mussey removed to Cincinnati to take the professorship of surgery in the Medical College of Ohio. Dr. Worcester accompanied him and began practice in Cincinnati late in 1838.

In February 1841 he went to Paris where, thoroughly familiar with the French language, he walked the hospitals, attended daily autopsies, and heard the lectures of the eminent group then teaching in that city. During eight months he gave especial attention to pathology, diseases of the skin, and the then new methods of auscultation and percussion in diagnosis. He then spent two months in London hospitals.

Returning to his practice in Cincinnati, he gave especial attention to diseases of the skin and chest, being the only man in Ohio who had training in the new French methods. He was soon used as a consultant and developed a large practice.

On his return from Europe he was married to a young woman already ill with pulmonary tuberculosis, who died within a year. Dr. Worcester contracted the disease. "He had embraced peculiar views, in regard to consumption, believing it to be contagious."[24]

During the session of 1842-43 he was Professor of Physical

Diagnosis and Pathological Anatomy in the Medical College of Ohio, the first time that the phrase "physical diagnosis" was used in a professorial title in the United States. He resigned at the end of one session because of ill health.

Dr. John Delamater had been a professor in the Medical Department of Dartmouth College when Dr. Worcester was a student there, and also a professor at Cincinnati in 1839-40, where he again came in contact with Dr. Worcester. When Dr. Delamater was organizing a teaching staff to begin medical instruction in Cleveland in November 1843, he induced Dr. Worcester to join the group to teach physical diagnosis, pathological anatomy, and diseases of the skin, the subjects that he had studied in Paris. Dr. Worcester taught during the first two sessions from 1843 to 1845. His failing health prevented his teaching in 1845-46 and 1846-47, although he was still carried as a member of the faculty.

He was unusually popular as a teacher, "zealous, clear, intelligent, and emphatic, and his mind was ever master of his subject."[25] He had a better training in the subjects he was teaching than any other man in the West.

In 1845 Dr. Worcester published his richly illustrated treatise on the diseases of the skin, the first textbook on this subject by an American author, and much used in medical colleges for the next twenty years.[26] He also published articles in medical journals on diseases of the heart and chest.

Dr. Worcester died of bronchial pneumonia at Cincinnati April 7, 1847, at the age of thirty-five years. An editorial in a Cincinnati newspaper said of him: "His life was laborious, benevolent, and beneficent; brief indeed, but full of intellectual and moral achievement."[27]

Samuel St. John

Dr. St. John was born at New Canaan, Connecticut, March 29, 1813, the son of a merchant who held the offices of town clerk, town treasurer, and postmaster coincidentally and continuously for twenty-five years.[28] Dr. St. John was graduated at Yale College in 1834 as valedictorian of a class of sixty-six gradu-

ates. The next five years were spent in study, one of them in Paris and London in the study of medicine and natural history. During three years in New Haven he studied chemistry under the elder Benjamin Silliman, and also studied geology and natural history. He was enrolled as a medical student during one session, was tutor in 1836-37, and he also attended a private law school and was admitted to the bar. However, he never practiced either law or medicine; his entire career was that of a teacher.

In 1837 Western Reserve College established a professorship of chemistry, mineralogy, and geology. Dr. St. John was elected to this professorship and inaugurated in 1838. He was given a year leave of absence for further study. His choice was probably influenced by the fact that he had a medical education. The college contemplated establishment of a medical department in the near future and a professor of chemistry also educated in medicine would provide a liaison officer for the two departments.

Dr. St. John spent the year 1838-39 as a student and assistant of Dr. John Torrey, Professor of Chemistry and Botany in the College of Physicians and Surgeons of New York City; one of the eminent scientists of the middle nineteenth century. During part of the year Dr. St. John was an assistant in the New York Geological Survey of which Dr. Torrey was in charge of botany.

Dr. St. John began teaching in the undergraduate college at Hudson in September 1839, and with five years of graduate study he was the most thoroughly trained man on the faculty. In 1840 he received the honorary degree of Doctor of Medicine from Vermont Medical College at Woodstock and in 1857 the same degree from the College of Physicians and Surgeons of New York City. He received the honorary degree of Doctor of Laws in 1849 from Georgetown College in Kentucky.

The name of Dr. St. John does not appear in the list of teachers announced in August 1843 for the first session of the medical college in Cleveland. However, he gave the address to the graduates for the faculty at the first medical commencement in

February 1844. The faculty records at Hudson show that he was absent from Hudson during January and February 1844, and it is probable that he gave a course in medical jurisprudence to the medical students in Cleveland during these two months, although it is known that he did not teach chemistry there in the first session. He has always been called one of the founders of the medical department.

When the medical faculty was formally organized by the Board of Trustees in March 1844, Dr. St. John was appointed Professor of Chemistry and Medical Jurisprudence, subjects he continued to teach until his resignation in 1856. He had had two years of experience as an assistant teacher in two eastern institutions and five years of experience as a professor in the undergraduate college at Hudson when he was appointed a professor in the medical department in March 1844.

He taught each year in the medical department in Cleveland from November to March, and gave his instruction in the undergraduate college at Hudson from March to July. This arrangement continued until he resigned from the faculty of the undergraduate college at Hudson in March 1852 because of differences with the president. He continued as a member of the medical faculty and moved from Hudson to reside in Cleveland in October 1852.

Dr. St. John states in a private letter that he declined the offer of a professorship in Cleveland University at this time. He also says he was offered professorships in Farmer's College at Cincinnati, Jefferson College at Canonsburg, Pennsylvania, the Medical Department of the University of Maryland, the Berkshire Medical College at Pittsfield, Massachusetts, and Kenyon College at Gambier, Ohio. He accepted a temporary appointment at Kenyon College as Professor of Geology and Mineralogy, and taught there during the latter part of the college year 1851-52.

He refused all these offers because he was a candidate to succeed the elder Benjamin Silliman as Professor of Chemistry at Yale College. However, the younger Benjamin Silliman was appointed to succeed his father in 1854.

Dr. St. John was the principal of the Cleveland Female Seminary from 1852 to 1856 in addition to his position on the medical faculty. He did much public lecturing on scientific subjects, and also participated in many public enterprises in Cleveland.

During the years that he was on the medical faculty he shared with Dr. John Delamater, Dr. Ackley, and Dr. Kirtland the reputation of being one of the outstanding teachers in all medical colleges of the West in the subjects that he taught.

Dr. John Torrey, with whom Dr. St. John had worked in 1838-39, resigned his professorship in the College of Physicians and Surgeons of New York City in 1855. Dr. St. John was appointed to the vacancy and began teaching chemistry and medical jurisprudence there in the fall of 1856. His teaching career in New York City was highly successful. It has been stated that he was a professor in Columbia University. The medical college was entirely independent when he went to it. In 1860 it formed an affiliation with Columbia College, but Dr. St. John never taught in the undergraduate college; another man held the professorship of chemistry in that institution.

During the years of his teaching in New York City he resided at his birthplace in New Canaan, Connecticut, not far distant, where he became the leading citizen of the town, as his father had been before him.[29]

Dr. St. John was considered one of the leading teachers of chemistry in American medical colleges in the middle of the nineteenth century. He was a member of several national scientific societies. He died at New Canaan, Connecticut, September 9, 1876, at the age of sixty-three years. Until his death he actively engaged in teaching. One of his sons became a prominent physician of Connecticut and taught for a few years in the Yale Medical Institution.

Jacob John Delamater

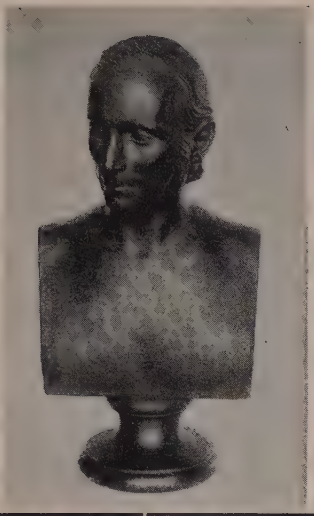
The younger Dr. Delamater, as he was usually called to distinguish him from his father, was born at Albany, New York, June 25, 1815, the elder son of Dr. John Delamater.[30] I have been unable to find many facts about his life. He completed a

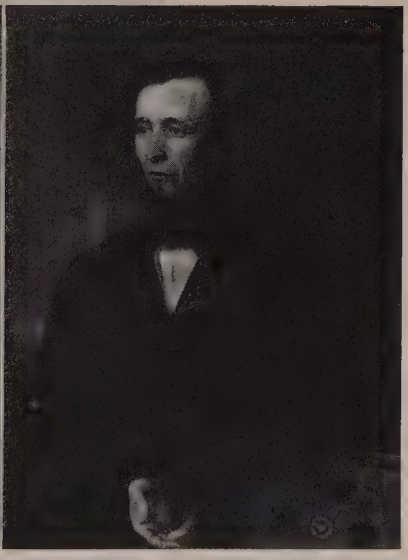
course in an academy and entered the sophomore class of Williams College in 1834 and was there during the college year 1834-35. The fact that he entered in advanced standing indicates that he probably had attended some other college of arts; I have been unable to locate the college. He was a student at the College of Physicians and Surgeons of the Western District of New York at Fairfield during the session of 1835-36, while his father was a professor in that institution. He entered Geneva Medical College for the session of 1842-43, the last session that his father was a professor in that institution. He was a student in the Medical Department of New York University in 1843-44 and received the degree of Doctor of Medicine in March 1844. I have been unable to determine what he was doing in the six years from 1836 to 1842.

He received the honorary degree of Master of Arts from Western Reserve College in 1851, and the same degree from Illinois College in 1853. These two honorary degrees indicate that he was well educated, which is supported by other evidence.

His name is not in the list of teachers published in August 1843 for the first session of the medical college in Cleveland. He could not have taught there throughout the session because he was a medical student in New York City. However, the records of the Medical Department of New York University show that he did not matriculate until the middle of December 1843, although the session began in late October. This suggests that possibly he was the demonstrator of anatomy at Cleveland during November and part of December 1843. He has always been classed as one of the seven founders of the medical college in Cleveland.

He began medical practice with his father in March 1844, in Cleveland, and in the same month was appointed Lecturer of Anatomy and Physiology. It was not customary to give the title of Professor to an inexperienced medical teacher. He was advanced to a professorship in these subjects in 1846. Resignations of two members of the medical faculty in 1856 caused a reorganization and at this time Dr. Delamater became Professor of Materia Medica, Therapeutics, and Medical Jurisprudence.





THE YOUNGER FOUNDERS

NOAH WORCESTER

SAMUEL ST. JOHN JACOB JOHN DELAMATER

He occupied this professorship until he resigned in February 1861 at the same time that his father resigned.

Dr. Delamater was an able public speaker and was frequently sent as a delegate of the medical faculty. He went in this capacity to the United States Medical Convention in New York City in May 1846, which was the preliminary meeting of the organization of the American Medical Association, and was also the delegate of the faculty at the organization of that association in Philadelphia in 1847. All regular medical colleges were asked to send delegates to this meeting as well as to state, district, and county medical societies, because one of the two major purposes in founding the association was to improve medical education.

Dr. Delamater was a facile writer. Published specimens of his writing show familiarity with medical literature and also with classical and English literature. His style is good although embellished with many similes and some hyperbole. I have found only a little reference to the quality of his teaching; that little is commendatory.

He was first married in 1838. Of three children, the only son became a prominent lawyer. It is probable that there was a second marriage. Dr. Delamater left Cleveland in 1861. He was a surgeon in the army during at least a part of the Civil War. The record of his subsequent career I have been able to find only in fragments. He resided in Washington during the last eleven years of his life. He was for a time a clerk in the United States Bureau of Pensions and later is designated as a "medical reviewer," probably in connection with applications for pensions.

Evidence is conflicting as to the date of his death. The label on his portrait in possession of the School of Medicine bears the date 1880. Presumably this printed label was affixed before 1890. The final figure in manuscript might easily have been confused with a figure 6. The official records of the health department of Washington give his death as September 25, 1886 at the age of sixty-five years. The date of his birth is known to have been in 1815 and he would have been sixty-five years of age in 1880. The Washington city directories carry his name

up to 1885. The age given at death should not be taken too seriously, because elderly men in medical practice frequently stated their age to be less than it really was. Therefore the weight of evidence is that he died in 1886 when he would have been seventy-one years of age.

He was the youngest of the group of the seven founders and the one concerning whom the least information has been found after diligent search.

Summary

The faculty of seven founders of the Medical Department of Western Reserve College was well balanced in respect to the ages of its members, with two men—Dr. John Delamater and Dr. Kirtland—of experience and mature judgment in their fifties, and five younger men in their most active years ranging from twenty-eight to thirty-five years of age. All except the younger Dr. Delamater are known to have had previous experience in institutional medical teaching.

Dr. St. John and Dr. Worcester were graduates of the two leading colleges of arts in New England and both had studied medicine in Europe, something rare in that era. Two others—Dr. Cassels and Dr. Jacob Delamater—had completed the second year in a college of arts. Few medical colleges of that time had a faculty the majority of the members of which had attended a college of arts, and yet fewer medical faculties, except those in the large cities of the East, had two members who had studied medicine in Europe. These seven men held medical degrees from seven different medical colleges. Three of them were natives of New York state, two of Connecticut, one of New Hampshire, and one of Scotland. Four of these men received the honorary degree of Doctor of Laws from four different institutions while yet active members of the medical faculty in Cleveland, a degree that was considered the highest testimony of ability that an educational institution could confer.

Dr. St. John was a member of Phi Beta Kappa by reason of his high scholarship when an undergraduate student at Yale

College. In 1847 a branch of Phi Beta Kappa was established at Western Reserve College and a few months later the five other members of the medical faculty were made honorary members of Phi Beta Kappa; Dr. Worcester had died before this. These facts show that the members of this group were considered by their contemporaries to be well educated and able men.

In the late 'forties and early 'fifties medical educators in eastern states several times were reported to have said that this was the best medical faculty west of the Allegheny Mountains, and a few are said to have stated that there was no better balanced nor more efficient medical faculty in the entire country. These statements of purported comments were made by men connected with the medical college in later years, without identification of the original commentators.

Striking differences of temperament were found in this group, ranging from the quiet modesty of the elder Dr. Delamater to the forcefulness of Dr. Ackley. Their records show that all of them were versatile and that their versatility went beyond medicine. Three of them—Dr. Cassels, Dr. Kirtland, and Dr. St. John—also had national reputations in one or more fields of natural science outside medicine.

It was a strong group who continued to work together for the advancement of medical education for thirteen years with no break except the early death of Dr. Worcester. This stability was remarkable in an era when the faculties of most medical colleges changed in respect to some members every year and in respect to the majority of the members every few years. This stability was favorably mentioned in medical journals several times.

We shall now proceed to consider what this group accomplished in the first period of the history of the Medical Department of Western Reserve College.

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VII

INFANCY AND ADOLESCENCE: 1843-1861

THIS CHAPTER treats of the events connected with the Medical Department of Western Reserve College from its founding until the beginning of the Civil War.

Cleveland had an extent within the city limits in 1843 of less than three square miles, bounded on the north by Lake Erie, on the west by the Cuyahoga River, and on the south and east by a line approximately in the position of the present East 22nd Street. Ohio City was a separate municipality west of the river, and was merged with Cleveland in 1854.

The rapid growth of Cleveland began with the completion of the Ohio Canal in 1832, and it was incorporated as a city in 1836 with about 5,000 inhabitants. The population had increased to over 9,000 in 1843.

The First Session

The sources of information concerning the first session of medical teaching in Cleveland are collateral rather than official, chiefly from newspapers. The minutes of the teaching staff for the first session—if any were kept—are not known to be in existence.

The first definite record is an editorial in a local newspaper in mid-July; this editorial names five of the teachers, states that instruction will begin on November 1, and mentions that "a splendid and commodious building has been obtained and arrangements completed."[1] This was three weeks before the action of the Board of Trustees of Western Reserve College appointing an examining committee as a method of conferring degrees. Instruction was begun in rented quarters which are briefly described in chapter X.

The first publication of the new medical college in Cleveland was a circular issued in August 1843 after the arrangement for conferring degrees had been made on August 4. No copy of

the circular in pamphlet form has been found. However, its contents appear as an advertisement in a Cleveland newspaper.[2] The plan for conferring degrees was given, together with the names of the examining committee. The traditional seven professorships were enumerated. However, the teachers were not called professors because they had as yet no appointment to this title. The men announced for teaching in the session to begin November 1 were: Horace A. Ackley, M.D., Anatomy, Physiology and Operative Surgery; Jared P. Kirtland, M.D., Theory and Practice of Medicine; J. Lang Cassels, M.D., Chemistry and Pharmacy; John Delamater, M.D., Materia Medica, Obstetrics, and Principles of Surgery; and Noah Worcester, M.D., General Pathology and Physical Signs of Disease. This list includes five of the men who have traditionally been called the founders. The precedence given to the name of Dr. Ackley suggests that he was the most active man in the initiation of founding the institution; this is supported by collateral evidence.[3]

Collateral evidence suggests that, in addition to the five men named in the circular, Dr. Samuel St. John probably gave a course in medical jurisprudence during January and February 1844, and also that possibly Jacob John Delamater served as demonstrator of anatomy during the first six weeks of the session.

Institutional medical teaching in Cleveland was inaugurated on the morning of Wednesday, November 1, 1843 by an introductory lecture by Dr. Kirtland given in the Presbyterian Church on the Public Square and was open to the public. Dr. Ackley and Dr. John Delamater followed with introductory lectures in their subjects.[4] Sixty-seven enrolled students were in attendance.

The early weeks of the session were disturbed by attacks in the newspapers by the authorities of Willoughby Medical College. The charge that the degrees under the announced plan would be illegal was emphasized by more active methods. Students were sent from Willoughby to interview those planning to enroll at Cleveland and to advise them "not to buy their

tickets," that is, not to pay their tuition. Each day for several weeks a four-mule team drove about the Cleveland streets with the offer to transport to Willoughby any student and his trunk without charge. Only a few yielded to this proselyting.

The several teachers were not all teaching at the same time. Dr. Worcester did not arrive in Cleveland until December 27 and began teaching on January 3.[5] Dr. John Delamater taught in three different medical colleges in 1842-43: Willoughby Medical College, Geneva Medical College at Geneva, New York, and Franklin Medical College at St. Charles, Illinois. He published a notice in Cleveland newspapers in August 1843 saying that although he had been announced as a teacher at Geneva for the next session, he had resigned and would not teach there.[6] Franklin Medical College was not mentioned.

Franklin Medical College had a short life and its records have been lost. Dr. Zeuch, the historian of early medicine in Illinois, lists the faculty of this college including Dr. John Delamater as the professor of surgery and says: "This faculty gave a course of lectures . . . in the Fall of 1842 and during the year 1843-44."[7] The statement as to his teaching in Illinois in 1843-44 is probably incorrect because Dr. Delamater's prescription book, which has been preserved, contains prescriptions dated at Cleveland continuously from August 1843 to May 1845. He probably resigned after the announcement of the Illinois institution for 1843-44 had been published.

The Cleveland newspapers supported the new medical college. Frequent news items were printed and several editorials defended the teachers against the attacks by the officials of the Willoughby Medical College, while other editorials quoted the opinions of leading lawyers that the method of conferring degrees was legal. A laudatory editorial toward the end of the session said that the first session had been harmonious and highly successful.[8]

The students met at the end of the session and passed resolutions commending the instruction and "our professors,"[9] although the teachers had no formal titles in the first session. The first session in Cleveland, with competent leadership and

experienced teachers, was far different from the first session of the Willoughby Medical College nine years earlier.

During this session an average of thirty lectures was given each week—six lectures for each of five days of the week. Wednesday of each week was devoted to clinics in surgery in the forenoons and in medicine in the afternoons. This is of historical interest because this feature was not included in the course of most medical colleges at that time. The community of two adjacent cities with a combined population of nearly 15,000 people, together with neighboring villages, furnished abundant material for the free clinics. "The number of surgical operations performed in presence of the medical class was considerable—among these were several of difficulty and importance, such as Lithotomy, Couching, Tenotomy &c, &c."[10] Therefore in the first session students saw operative procedures in the present-day specialties of urology, ophthalmology, and orthopedics, besides many amputations and much minor surgery, all done by Dr. Ackley.

The First Commencement

Instruction closed on February 17 and was followed by a day of examinations of the candidates for graduation. These examinations were by the examining committee appointed in August 1843. A commencement was held on Tuesday, February 20, 1844, although the trustees had not met to grant the medical degrees. The eighteen successful candidates read their theses at a public meeting at the medical college in the forenoon. In the afternoon the first medical commencement was held in the Presbyterian Church at the northwest corner of Ontario Street and the Public Square. Dr. Samuel St. John gave an address to a large audience; it was highly praised in the newspapers. Dr. George G. Baker, who was the chairman of the committee on examination, presented a certificate of approbation to each of eighteen graduates.[11]

These certificates were essentially licenses to practice because medical societies accepted them as sufficient evidence to grant a license without further examination. The degree of Doctor of

Medicine was not voted for these men until March 20, so these men were essentially licensed to practice before they received their medical degrees. Therefore on February 20, 1844, the present School of Medicine of Western Reserve University contributed its first group to the practicing medical profession.

Teaching Equipment

Peripatetic professors customarily carried their teaching equipment with them from place to place, and usually each teacher in a medical college personally provided much of the equipment that he used in teaching. In the first session in Cleveland all of the teaching equipment was provided by the individual teachers.

The first catalogue of the Medical Department of Western Reserve College, issued in April 1844, makes the following references: "Appropriate means are already possessed for illustrating the various branches taught in the Lectures. The means for illustrating Midwifery and its incident branches are ample." Specifically mentioned are: "The large and valuable Museum of Special and Morbid Anatomy; a large and elegant collection of Paintings and Colored Plates illustrative of every variety of morbid conditions; a handsome set of specimens of Materia Medica; a large collection of instruments and apparatus in Operative Surgery; the nucleus of a Library consisting of about 1,000 volumes of medical books."

Each of the individual owners of teaching equipment transferred his personal ownership to a joint ownership in 1844. The medical department also borrowed teaching equipment. During all but five of the years from 1844 to 1888 the same individual was at the same time the professor of chemistry in both the collegiate and medical departments, giving instruction in different seasons of the year in the two departments. The collegiate department had an adequate equipment for giving demonstration lectures in chemistry, and the trustees permitted such equipment as was needed to be taken to the medical department during the months of instruction in chemistry there.

Some new equipment was purchased and replacements made. The statement of equipment carried in the catalogue for 1860-61, the last year of the period considered in this chapter, includes the following:

> The Institution possesses large and valuable Museums of Special and Morbid Anatomy, and all the recent discoveries in Physiology and Anatomy are demonstrated, and their practical application illustrated. A large and elegant collection of Paintings and Colored Plates, illustrative of Pathological and Topical Anatomy, Diseases of the Skin, Veins &c., mounted and displayed in such a manner as to be accessible to the Class, furnish the department of Pathology; while a suite of specimens of substances used for remedial purposes, together with a set of enlarged Colored Drawings, afford ample means for the elucidation of Materia Medica.
>
> The Chemical Course is rendered full and effective by the extent and completeness of the Apparatus, which is adequate to the demonstration, not only of the principles of Chemistry proper, but also of Caloric, Light, Electricity, Galvanism, Magnetism, Electro-Magnetism, Pneumatics, &c. This course also embraces thorough instruction in Toxicology. The principles of Operative Surgery are exemplified by the aid of a large collection of Instruments and Apparatus.

Comments by those not connected with the Medical Department of Western Reserve College indicate that its teaching equipment was considered adequate for that era and superior to that possessed by many medical colleges.

The Library

The thousand medical books mentioned in April 1844 were then the personal property of the several teachers. These were soon transferred to a joint ownership, as was the equipment. A manuscript catalogue of 1852 shows that John Delamater contributed a larger number of volumes than any other one individual. The library received a few accretions by purchase and others by gift. Bound files of some of the current medical journals were added. Also the graduation theses of each class were customarily bound in one or more volumes and deposited in the library. The library was kept in the faculty room and some member of the faculty had official appointment as a librarian.

The teaching equipment and library were not the property

of the Board of Trustees until after 1881. From 1844 to 1851 the ownership was considered to lie with the Board of Agency. In 1851 the original Board of Agency resigned and, by action of the Board of Trustees, the faculty became the Board of Agency. Thus equipment and library came to be owned jointly by the members of the faculty, a relationship that brought intricate problems when some members of the faculty resigned.

The Curriculum

The medical curriculum of the middle nineteenth century showed wide variation in organization of medical teaching from the arrangement now current, and also from that of all other contemporary types of education of that era.

In primary and secondary public schools, in academies, in colleges of arts, in theological seminaries, and in law schools, the curriculum in the middle nineteenth century was graded into successive terms and years. Students were organized in classes, grades were recorded, examinations held, and periodically students were promoted from one class to another, in a system analogous to the educational procedure of the present day. In colleges of arts a definite educational requirement for entrance prevailed.

In no medical college was there an educational requirement for entrance. There was no differentiation of students on the basis of previous study of medicine; that is, the curriculum was not graded. No grades were recorded and no examinations given until a student applied for an examination immediately preliminary to recommendation for a medical degree. Students were not arranged in classes either in teaching or in the lists of students published in the catalogues. Medical educators spoke of their class, not of their classes. No student could be dismissed for lack of scholarship because of lack of any record of progress in his studies. However, occasionally a student was advised not to attempt continuance of medical study. I have never seen an adequate explanation of this wide divergence of medical education from other contemporary educational methods which prevailed until after 1880. The explanation may be

related to the fact that only in medicine was the educational conduct under two independent authorities, the preceptor and the medical college.

The standard requirement for the degree of Doctor of Medicine until after 1880 included the study of medicine for three calendar years, including attendance on at least two courses of lectures—that is, two sessions in a medical college. If a student took all his institutional medical education in one medical college he listened to the same lectures in two, or perhaps three, sessions unless a change of teachers occurred or the teachers revised their didactic lectures annually. Many students migrated from one medical college to another to avoid this repetition.

Medical education until about 1880 consisted of two distinct correlated parts, that under a preceptor and that under a medical faculty. The preceptorial factor was mainly practical, the faculty factor chiefly didactic. Each supplemented and reviewed the other. In the lectures the student heard an orderly review and discussion of many diseases that he had seen with his preceptor. After attending one session of lectures, the student saw under his preceptor some patients with ailments that had been described and discussed in the lectures.

The repetitive curriculum of the medical colleges under which a student listened to the same lectures in a second session that he had previously heard was a system of review, the lectures being more intelligible on repetition because he had received more clinical instruction from his preceptor in the interval.

Students talked little of the subjects in which they received instruction, but rather of the men who taugh them. The student did not say that he had taken a course in obstetrics or passed in surgery. He said he had taken Dr. X or passed Dr. Y. The headings in the notebooks of that period are not the names of subjects but the name of lecturers. The printed schedules of days and hours have the entries of names of men, not of subjects. Catalogues were indefinite, and not until late in the nineteenth cetury did they carry any tabulation of hours devoted to each subject. Therefore accurate information con-

cerning the proportion of attention given to the several subjects in any medical college before the Civil War is not available.

The sources of information as to what subjects were taught in the Medical Department of Western Reserve College before the Civil War are: the subjects listed in the titles of the teachers, those in the general descriptions of the course of instruction, and the titles of recommended textbooks. From these sources the following list is compiled: anatomy, chemistry, toxicology, physiology, pathology, botany, materia medica, pharmacy, therapeutics, physical diagnosis, theory and practice of medicine, principles and practice of surgery, operative surgery, obstetrics, diseases of women, diseases of children, diseases of the skin.

Medicine and surgery were more inclusive than now and evidence shows that some of the subject matter now taught in separate specialties was taught in Cleveland in the 'forties and 'fifties. Among these are hygiene, ophthalmology, otology, rhinology, laryngology, orthopedics, and gynecology. Fractures and bandaging were included in the general course in surgery; also, beginning in 1847, general anesthesia by ether.

Major attention was given to inorganic chemistry in instruction in this subject, and some elementary physics was taught. Some biochemistry was taught under the designation of physiological chemistry. Attention was given to poisons, also to minerals as sources of drugs. Urinalysis was demonstrated.

Much emphasis was put on pharmacy in an era when most physicians compounded their own prescriptions. In all clinical lectures favorite prescriptions were given and the notebooks of students contain more prescriptions than any other one item. The technique of bloodletting was taught because phlebotomy was a therapeutic measure in use until the 'sixties.

Instruction in pathology was general pathology in relation to the incidence and progress of disease. Pathological anatomy was taught with use of museum specimens. Autopsies were rare. Probably no microscopical demonstrations in either pathology or histology were given in Cleveland before the Civil War. The college did not own a compound microscope until 1887, al-

though one of the professors had one. Bacteriology was unknown.

Methods of Instruction

The method was predominantly didactic, the exceptions being the weekly clinics and practical anatomy. Didactic lectures were given mornings and afternoons during five days of the week; Wednesday was devoted to clinics. Some demonstrations were given in chemistry, pharmacy, and pathology. Charts were more used than the blackboard. Students were expected to examine specimens in materia medica and to supplement the lectures by study of textbooks.

Much variety appeared in the clinics. For a time, one of the newspapers each week printed the list of surgical cases shown and the operations done, with especial notice when Dr. Ackley successfully tied the iliac artery, a rare operation at that time. The cases shown in the medical clinics were chiefly ambulatory, with emphasis upon diagnosis.

The regular course included few recitations and little quizzing except in practical anatomy. No examinations were given except on application by those who hoped to be graduated. Quiz courses, given in the evening, were offered by some of the teachers. For these an additional fee was charged. They came usually late in the session and were patronized almost exclusively by those who planned to take the examination for the medical degree at the end of the session.

The only instruction of a laboratory nature was practical anatomy. This institution was one of few medical colleges of that time requiring an examination in practical anatomy before recommending a candidate for the medical degree. This requirement was made of the first class, and continued. Some prominent medical colleges did not introduce this requirement until thirty years later. The requirement of an examination in practical anatomy was potentially a requirement of dissection. However, the student was not required to dissect at the medical college. He might do it under his preceptor, as many did, and if the preceptor certified that the student had made a dissection,

the student was admitted to an examination in practical anatomy.

In the first catalogue, issued in April 1844, appears the statement: "Provision is made for the prosecution of practical anatomy on the most liberal terms." This statement continued to appear in the catalogues for many years.

The "terms" were not for instruction, which was included in the regular fees, but for the cost of securing dissecting material. Inasmuch as no adequate law in Ohio until 1896, provided for legal acquisition of cadavers, the material had to be procured illegally. The laity called this "graverobbing" or "bodysnatching," while the profession designated it as "resurrection." The "fine art of graverobbing" involved a definite technique. Failure to observe each step meticulously often brought detection resulting in many episodes in this and other medical colleges.

Diaries of students in Cleveland which have been preserved show that a dissection was carried through in a short time, usually in less than a week. This was desirable because embalming was then unknown and also because the possibility of search by a constable always impended. In some cases a group of students engaged in dissection ceased going to lectures until they had completed the dissection; in other cases they worked for the greater part of successive nights.

Student Expenses and Credentials

The catalogue during several of the early years carried a statement that $100 would cover all the expenses of a student for a session. The only attempt to estimate personal expense was information of average cost of room and board. The first catalogue published in April 1844 said: "Good boarding including room, lodging, fuel and light may be obtained at $1.50 to $2.00 per week. Every facility for self boarding may be obtained at moderate cost." This estimate was carried until 1852, when it was advanced by half a dollar a week. In 1853 the estimate was "two or three dollars per week," where it re-

mained until after the Civil War. No estimate of the cost of textbooks was given. A list of recommended books was printed in the catalogue without prices. Students were especially urged to buy a medical lexicon.

Each student upon arrival was required to sign a matriculation book, giving his name, age, and residence, and the name of his preceptor. At this time he paid a fee of $3.00, advanced to $5.00 in 1853, and received a matriculation card which admitted him to lectures.

The method of paying tuition in American medical colleges during most of the nineteenth century was different from that in other educational institutions. In the early part of the century the student went to each individual teacher to enroll in that teacher's course and paid him a stated fee. He received a printed card signed by the teacher and with the name of the student entered on it.

In the early part of the session an officer called an "usher" stood at the entrance of the lecture room to examine the card of each student who sought to enter. Inasmuch as this card was required to be shown to gain entrance, it came to be called a "ticket."

The fees of different teachers varied, based on the number of lectures in their courses, and these fees were listed in the circular and catalogue. Students came to rate the importance of a teacher by the amount of his fee; a "ten dollar professor" was considered twice as important as a "five dollar professor," bringing embarrassment within the faculty. Moreover, this method required a personal financial transaction between each teacher and each student. Also because the "tickets of the professors" were accepted as evidence of attendance at the entire course of lectures, if the student secured these as soon as he paid his fees he might then withdraw in possession of credentials that attested instruction that he had not actually received.

Four changes in the system were made about 1825. Each medical faculty appointed a faculty treasurer who conducted all financial transactions with students. Publication of the fees of the individual teachers ceased and instead a single sum for

"all of the tickets" was announced. When the student paid his fees he received a "general ticket" issued and signed by the faculty treasurer which admitted the student to all instruction but was not accepted as evidence of attendance throughout the session. In the last week of the session the general ticket of each student was exchanged for a set of tickets of all the professors.

These changes had become general before the Medical Department of Western Reserve College was founded. In the first catalogue of this institution is the statement: "The tickets of the several professors are expected to be taken or arranged for during the first two weeks of the term." This statement appeared until the middle 'sixties when a new plan was tried, the description of which belongs to the next chapter.

The term "tuition" was not used in medical colleges until late in the nineteenth century. Instead this expenditure by students was called "cost of tickets." The tickets of the professors were highly esteemed and carefully guarded by the students. Many sets of them have been preserved. The tickets were the only evidence the student could show that he had attended an institution if he did not remain to secure a diploma. Medical colleges issued no other credentials, and if a student, after having attended one medical college for one session, wished to enter another medical college with expectation of graduation after one additional session, he showed his tickets received in the institution he had formerly attended. These tickets were also shown when he applied to the censors of a medical society for examination for license.

This type of credential resulted in unauthorized printing and forgery of tickets. Ornamental fonts of type were used in printing the tickets to minimize copying, and in a few cases engraved plates were used.

The cost of all tickets in the first session in Cleveland was $72, the amount that had been charged at Willoughby. This amount was announced for 1844-45, but soon after the announcement the Willoughby Medical College reduced its corresponding charge to $50. The institution in Cleveland met the reduction, and beginning in 1844 the cost of tickets was $50;

in 1853 the cost was advanced to $60, and so continued until the middle 'sixties.

The candidate for graduation paid a fee of $20, which increased to $25 in 1863. This fee—returned if he failed to graduate—covered the $5.00 paid to the president for the diploma, the expenses of censors who participated in the examinations, and the expenses of Commencement, including a "banquet" customarily arranged by the faculty for the graduating class.

The statement quoted from the catalogue that the tickets must be taken "or arranged for" in the first two weeks reflected the difficulty of many students in paying $50 in one sum, and a substitute was a note for $56—$70 after the cost of tickets became $60—payable in twelve months and jointly signed by some responsible person. Thus the interest was included in the face of the note. In 1848 an added requirement was imposed that a justice of the peace or a judge in the county of residence must certify the responsibility of the cosigner. Many of these notes were not collected until after an interval of several years, and some were never collected.

Numerous "special arrangements" are recorded. One student wished to buy his tickets with a set of phrenological charts, and another with an "electrical machine"; both offers were refused as not equivalent to $50. One arrangement, amusing in its outcome, merits description. A student, coming from a distant part of the state, rode in bareback on a white horse and wished to buy his tickets by exchange of the horse, a fair price at that time for a sound horse. The treasurer accepted the horse and gave the student his general ticket, and then took the horse to his home for overnight. The next day a special faculty meeting convened to dispose of the horse. It was agreed that the members of the faculty would draw lots to determine who should accept the horse as the equivalent of $50 in his apportionment to be made at the end of the session. The lot fell to Dr. Ackley. Next morning he demanded another faculty meeting. He had found that the horse had the "heaves," making it worth much less than $50. After much debate the faculty decided that in drawing lots each had taken the risk of getting this horse with

the "heaves" and that since the lot had fallen to Dr. Ackley he must abide by his fate. Thus the elements of horsetrading came in as an auxiliary of medical teaching.

Requirements for Graduation

General education entered little into the decision as to conferring a medical degree upon a candidate. The Medical Department of Western Reserve College published no definite requirement of preliminary education until the late 'seventies. This conformed to the practice in all American medical colleges from 1810 until after the Civil War. The dean, or some other admitting officer, decided whether an applicant was probably fitted to be educated for entrance to the medical profession. The recommendation of the preceptor had a large influence in this decision. The recommendations of former teachers in the public schools or in an academy were influential for those few students who entered a medical college lacking previous study under a preceptor.

Two main factors decided whether an applicant should be graduated: completion of the standard thirty-six months of medical study, and the passing of an examination immediately preceding the conferring of the degree. The student was not admitted to this examination until it was established that he had begun medical study at least thirty-six months earlier and had continuously pursued it during the interval.

The Medical Department of Western Reserve College had an advantage over independent medical colleges in the fact that graduation could come either in early March, or in July when the undergraduate college held its Commencement. Each year a few men were graduated in medicine in July, part of them being those who had not completed the full thirty-six months of study at the time of the medical Commencement in March.

Two variations from the requirement of thirty-six months of medical study were permitted before 1861. The first catalogue in April 1844 announced: "Gentlemen who have been reputably engaged in the practice of medicine for four years may be admitted to an examination for the degree after having

attended a single course of lectures." A physician to be reputable had to hold a license from a medical society, which was granted only after three years of medical study. Therefore these men had been engaged in medical study and practice for at least seven years. Reputability further required that the individual's practice had not been tainted by electicism, homeopathy, hydropathy, or Thomsonianism.

A total of 1,852 different students are listed in the eighteen sessions of the first period. Of these, 303 registered as practitioners. The percentage of practitioners varied from nine to eighteen per cent in different years. Fifty of these practitioners already held the degree of Doctor of Medicine. Fifty-seven of them did not take the degree. The remaining 196 practitioners received the degree of Doctor of Medicine at the end of the session in which they were so registered. Of these, eighty-two had previously been students in the college and after one session had gone into practice and returned after from one to twelve years to attend a second session and receive the degree. This leaves 114 men who received the degree after attending only one session in the Medical Department of Western Reserve College. Record has been found of the previous attendance of more than half of these in some other medical college. The total number who were graduated under the concession made to practitioners was not over fifty and probably somewhat less. The concession to practitioners was terminated in 1862.

The second concession first appears in the catalogue of 1847, which stated: "Bachelors of Arts may be graduated after two years membership." This meant that two calendar years of medical study would be accepted from graduates of a college of arts for admission to the examination for the medical degree instead of the three standard calendar years. Sixty-two bachelors of arts entered from 1847 to 1860 inclusive. This concession continued until after 1880. These two concessions were usual in all medical colleges.

A student was required to make application for examination a few weeks before it was scheduled to occur. At this time he paid his graduation fee and presented his thesis. The method

of examination of candidates for the medical degree at the Medical Department of Western Reserve College was mainly oral. I have found a few references in the records to a written part of the examination. The only subject specifically mentioned for a written examination is chemistry. The oral examinations of each class usually extended over a period of three days. In large classes these examinations must have been conducted for groups of candidates.

The examination was by the convened faculty and as many of the censors as could attend. The professors led in putting the questions, with enough participation by the censors to warrant medical societies granting licenses to practice without further examination. At the conclusion of the examination the members of the faculty, and the censors who were present, jointly voted on each candidate. A majority vote brought a recommendation to the trustees for granting the degree in a report signed by all the members of the faculty and the censors who attended. Grades were recorded in these examinations and one graduate was designated as valedictorian at the Commencement.

The records carry little reference to failures at the examinations, only a few direct references and a few more suggestive. Some students were advised not to attempt the examination. During some years a supplementary course of instruction was given following the medical Commencement which afforded opportunity to repair deficiencies, enter another examination, and receive the degree at the Commencement of the undergraduate college in July following.

Graduation Theses

Each applicant for examination for the medical degree was required to present a thesis. This was the policy in all medical colleges until about 1880. I have read many of these dissertations both of the group presented in Cleveland and of groups presented elsewhere. The length varies from 3,000 to 10,000 words, the greater length being rare. Most of them could have been written in a few hours with the help of two or three text-

books. A few show extensive reading with citations to articles in medical journals. Occasionally one shows original observation, such as a record of a series of cases. The candidate was required to defend his written thesis and the conclusions which he had reached in his oral examination.

The subjects chosen or assigned for theses were in a narrow range, and often repeated. Anatomical, chemical, pathological, and physiological subjects were rare. Description of the natural history of some plant furnishing a drug shows the emphasis on materia medica in teaching. The majority of the subjects were clinical. Among the favorite subjects often repeated were: phthisis (pulmonary tuberculosis), cynanche trachealis (diphtheria), and remittent fever (malaria), diseases common in northern Ohio.

Attendance and Competition for Students

The table of enrollment at the Medical Department of Western Reserve College (Appendix H) shows much variation in the eighteen sessions of the first period. These figures are more interesting when analyzed in respect to the causes of increase and decrease. The causes are in part general and in part local. Competing institutions were a large factor in the size of the student body.

The nearest competitor in the early years was Willoughby Medical College, only twenty miles distant. It had the better building until the session of 1845-46, and living expenses were somewhat less in Willoughby than in Cleveland. Moreover, an endeavor was made at Willoughby to increase attendance by the offer of many free scholarships, a procedure which was not followed at Cleveland. The faculty at Cleveland was constantly abler than that at Willoughby.

The following table shows fairly even attendance in the two institutions until 1846-47, when the disparity became marked.

ENROLLMENT AT CLEVELAND AND WILLOUGHBY FOR SIX SESSIONS

	1842-43	1843-44	1844-45	1845-46	1846-47	1847-48
At Cleveland	—	67	109	160	216	240
At Willoughby	70	52	124	164	100	—

The Willoughby Medical College moved to Columbus after the close of the session of 1846-47. This left the Medical Department of Western Reserve College without a competitor in northern Ohio, but not for long. A sectarian medical college was organized in Cleveland early in 1850 under the name of the Western College of Homeopathic Medicine, and it began instruction in the fall of 1850. The details of this movement will be given in chapter XIV.

The removal of the institution from Willoughby was one cause of the large attendance in Cleveland in 1847-48, 1848-49, and 1849-50. In the latter session the attendance reached 255, the largest enrollment in the present School of Medicine of Western Reserve University until the session of 1930-31.

However, there was a general cause for this increase in the late 'forties, a cause which brought increased attendance in nearly all American medical colleges. The American Medical Association was organized in 1847 by delegates from medical societies and medical colleges. One of the two announced major objects of the association was improvement of medical education. The wide variation under preceptorial teaching was criticized. Therefore every physician who had only preceptorial training came under criticism. This stimulated the desire of physicians to be able to say that they had been graduated from a medical college.

At that time it was common practice for any one who had attended an academy, a college of arts, or a professional school, to say that he was a "graduate" of the institution even when he had not completed the course nor received a degree. Autobiographical sketches of physicians claimed graduation from two or three medical colleges attended in succession, although only the last of these had granted a degree. The laity did not distinguish between a "graduate" who had only attended a medical college and one who had received its medical degree.

Therefore many students entered a medical college and attended only one session and then proclaimed themselves as "graduates." Of the students enrolled in each session who were not graduated at the end of that session, in the eighteen years of

the first period of the Medical Department of Western Reserve College, an average of over sixty-three per cent did not return the next session; some of these returned after an interval of practice.

The decline in attendance in the Medical Department of Western Reserve College began in 1850-51. Both general and local causes can be assigned for this. The general cause was increase in the number of competing medical colleges. When medical instruction began in Cleveland the nearest medical colleges, besides that at Willoughby, were at Geneva, New York, over three hundred miles distant, and at Cincinnati, nearly as far away. The only other medical college north of the Ohio River and between the Allegheny Mountains and the Mississippi River was a recently founded small institution at St. Charles, Illinois.

Coincident with beginning of medical teaching at Cleveland on November 1, 1843, the Medical Department of Illinois College, at Jacksonville, was established. It was closed in 1848.[12] A month later, on December 4, 1843, Rush Medical College of Chicago began instruction. Its charter was issued in 1837.[13] This proved to be a permanent institution and attracted many students from Illinois and Wisconsin, and the attendance from these states in Cleveland soon became small.

The Medical Department of the University of Buffalo began instruction in 1847. In a few years the number of students diminished who had formerly come to northern Ohio from western New York and northwestern Pennsylvania.

Although the removal of medical teaching from Willoughby to Columbus decreased competition for students resident in northern Ohio, the Starling Medical College, which replaced the Willoughby Medical College at Columbus, soon had a new building and became a strong competitor for students of central Ohio, which had sent many men to Cleveland in the early years.

The Medical Department of Western Reserve College in the 'forties enrolled many students resident in Michigan. The University of Michigan opened its medical department in 1850 and thereafter comparatively few students came from Michigan to

Cleveland and the institution at Ann Arbor attracted students from northwestern Ohio. The field from which medical students could be attracted to Cleveland was much reduced in each direction in less than ten years, and this loss was not balanced by the increase of population in the Middle West in these years.

Three local causes influenced the decrease of attendance in the 'fifties. The establishment of the homeopathic medical college in Cleveland had some effect. The major cause was a serious dissension in the departments of Western Reserve College at Hudson, which began in 1850 and continued until 1855. This divided the trustees, the faculty, and the community into two violent factions, one opposing President Pierce, the other supporting him. Most of the students left the departments at Hudson. Knowledge of the condition became widespread and it was freely predicted that Western Reserve College would be forced to close. The general public did not appreciate that the medical department was financially autonomous and inferred that it also must close. The result of this uncertainty is seen in the decrease of attendance of medical students from 255 in 1849-50 to ninety-three in 1854-55, over sixty per cent. A member of the medical faculty wrote in a private letter in 1853: "We know that we have suffered from the impression that the Medical Department was included in the decline and downfall of Western Reserve College. We are at least twenty-five students short of what we should have had but for that. Our faculty has appointed a committee to confer respecting a dissolution of connexion with Western Reserve College."[14]

The controversy at Hudson had just been settled when Dr. Ackley and Dr. St. John resigned in February 1856. These two men were experienced and excellent teachers widely known for efficiency and dynamic personalities. Dr. Thayer and Dr. Weber, who replaced them, were inexperienced in teaching and little known. At the same time, Dr. John Delamater, because of age and failing health, was compelled to ask for an assistant to take over a large part of the teaching which he had carried for thirteen years. An adjunct professor was appointed, who at this time had no teaching experience, although he was well

educated and later became one of the strong men of the faculty. The result of these three changes in the faculty was a decrease of attendance of over one third at the next session.

The decrease continued until 1859-60, when the enrollment was only sixty-seven, one fourth of that in 1849-50. Attendance showed some recovery in 1860-61, the last year of the period of the history of the medical college considered in this chapter (Appendix H). Then came another general deterrent to attendance by the outbreak of the Civil War, the discussion of which belongs to the next chapter.

Women Medical Students and Graduates

The first woman to be graduated in medicine in the United States was Dr. Elizabeth Blackwell, a resident of Cincinnati, who received the degree of Doctor of Medicine from Geneva Medical College in 1849. That institution, because of the opposition to co-education in medicine, refused to accept any other woman student during the next twenty years.

The next woman to be graduated from a regular medical college was Mrs. Nancy (Talbot) Clarke, who was graduated at the Medical Department of Western Reserve College in 1852. This is said with the knowledge that the Female Medical College of Philadelphia also began to graduate women in 1852. That institution was considered irregular in its early years because several members of its faculty were eclectics.

Mrs. Clarke, then twenty-five years of age, resided near Boston, Massachusetts. She was the widow of a dentist. The Massachusetts legislature had enacted a law that physiology must be taught in all public schools of the state beginning in 1852. This presented a serious problem in teaching the subject to girls because few women knew any physiology. Mrs. Clarke decided to prepare herself for teaching physiology in the public schools of Boston. The only place where physiology was taught was in medical colleges and no regular medical college at that time would accept a woman as a student.

Mrs. Clarke had relatives in Cleveland and through them application was made for her admission to the Medical Depart-

ment of Western Reserve College. The records of the faculty show that on February 12, 1850, Dr. Kirtland moved that "respectable ladies be admitted to the lectures on the same terms as gentlemen." Dr. Ackley retorted with a motion that respectable Negroes be admitted. Both motions were laid on the table. However, Mrs. Clarke was enrolled at the beginning of the session of 1850-51 without further recorded faculty action.

The session of 1851-52 opened on November 5, 1851. On that day a motion was introduced in the faculty "that it is inexpedient to admit female students to our lectures." It was laid on the table until the next day, when it was adopted unanimously. Mrs. Clarke had probably already matriculated because she attended during the session of 1851-52 and was graduated in March 1852. Dr. John Delamater was her preceptor during the two years she was in attendance. She had changed her plan of being a public school teacher and immediately began practice in Boston, Massachusetts. I have elsewhere described her long and useful career in medical practice, which included the founding and support of a free dispensary for women and children in Boston.[15]

The next faculty action concerning women students came at the opening of the session of 1853-54. The wife of one of the male students wished to be enrolled. By unanimous vote the faculty gave to Dr. John Delamater, the dean, "discretion in admission of female students," without changing the policy adopted two years earlier. This wife of one of the male students was admitted. She was dismissed in January 1854, when it was discovered that she had concealed the fact of previous attendance at an irregular medical college. One other woman was also admitted at this time.

The other woman was Emily Blackwell, the younger sister of Dr. Elizabeth Blackwell. She had attended Rush Medical College during the session of 1852-53 but was refused further registration there on the advice of the Illinois State Medical Society. Miss Blackwell was graduated in March 1854. She immediately began her distinguished career in New York City with her sister. They founded a dispensary, then a hospital, and

finally a medical college for women. Dr. Emily Blackwell was one of the most distinguished early graduates at Cleveland and one of the few successful women surgeons of the nineteenth century.

Two women were admitted in November 1854 without further action of the faculty. In November 1855 two more were admitted who had already attended one session at the medical college for women in Philadelphia, which was by this time considered regular.

These four women were graduated in March 1856, the largest number of women graduated by any regular medical college (except those restricted to women) in any one year before 1872, when the University of Michigan graduated six women; it had graduated its first woman in medicine the previous year.

The four women graduated in Cleveland in 1856 were: Sarah Ann Chadwick, of Illinois; Elisabeth Griselle, of Ohio; Cordelia Agnes Greene and Marie Elizabeth Zakrzewska, of New York. Each of the first three practiced over fifty years in her native state. Dr. Greene conducted a sanitarium for women in New York state during many years; she gave especial attention to psychiatry, in which subject she established a wide reputation and published some books. Dr. Zakrzewska, Polish by birth, spent her early life in Berlin, Germany, where she was graduated from a school for midwives and for a time was assistant to Dr. Johannes Müller, famous physician and physiologist of that city. She came to New York City in 1853 and was attached to the dispensary founded by Dr. Elizabeth Blackwell and Dr. Emily Blackwell during 1853-54. She went to Boston, Massachusetts, after graduation in medicine, where she was long a professor in the New England Female Medical College of that city, which was merged into the Medical Department of Boston University in 1874. She founded the present New England Hospital for Women and Children of that city in 1862 and established the first training school for nurses in the United States. Her medical career of forty-six years brought her a nation-wide reputation.

The American Medical Association in 1856 adopted a report

advising against coeducation in medicine. Thereafter no regular medical college for men admitted a woman student until the late 'sixties. The eclectic and homeopathic medical colleges eagerly sought women students, which accounts for the fact that the majority of women physicians of the second half of the nineteenth century were attached to one of these medical sects.

Eight different women were enrolled at the Medical Department of Western Reserve College in the years from 1850 to 1856; six of them were graduated. No more were admitted until 1879. An inquiry in 1876 brought a vote of the faculty: "To adhere to our existing rule that it is inexpedient to admit women to the school." This rule had been adopted in 1851. The admission of women was again brought up in 1878, and on April 28, 1879 the faculty voted "that hereafter we will receive female students into the college." Few women applied. One was graduated in each of the years 1880, 1883, and 1884, when the old rule was reasserted and no more women were admitted until 1918.[16]

Changes in the Faculty

The teaching staff consisted of eight persons until 1847, of seven teachers from 1847 to 1856, and again of eight until 1861. One of these was the demonstrator of anatomy appointed annually by the faculty rather than by the trustees. Each demonstrator was a recent graduate of the college on first appointment. Five different men filled this position, with service ranging from one to five years, in the eighteen years of the first period.

The first change in the orginial corps of professors came with the death of Dr. Worcester in 1847. This had been anticipated three years earlier and plans had been made to attach the subjects which he had been teaching to other professorships, and therefore no successor was appointed.

No further change came for nine years. Two professors resigned in 1856, both having taught since the founding. These were Dr. Ackley, Professor of Surgery, and Dr. St. John, Professor of Chemistry and Medical Jurisprudence. The work of Dr. St. John was cared for by readjustment in the faculty. Dr.

Cassels, who had been teaching materia medica, therapeutics, and botany, had taught chemistry successfully at Willoughby Medical College from 1835 to 1843 and at Cleveland in 1843-44. He took over the teaching of chemistry, retaining only botany of his former subjects. Dr. Jacob Delamater was made Professor of Materia Medica and Therapeutics and also taught medical jurisprudence.

This left vacant the professorship of anatomy and physiology, formerly occupied by Dr. Jacob Delamater. Dr. Proctor Thayer was appointed to this position, the first alumnus to become a professor. He had completed the course in the preparatory department of Western Reserve College in 1846, and then had begun study of medicine under the preceptorship of Dr. John Delamater. He was graduated at the medical department in 1849. He practiced in a country town for four years, and then came to Cleveland to practice and also to serve as demonstrator of anatomy, and had served three years as demonstrator when appointed as professor. His appointment as demonstrator in 1853 was the beginning of thirty-seven years of continuous service on the teaching staff of the medical department, the greater part of it in surgery.

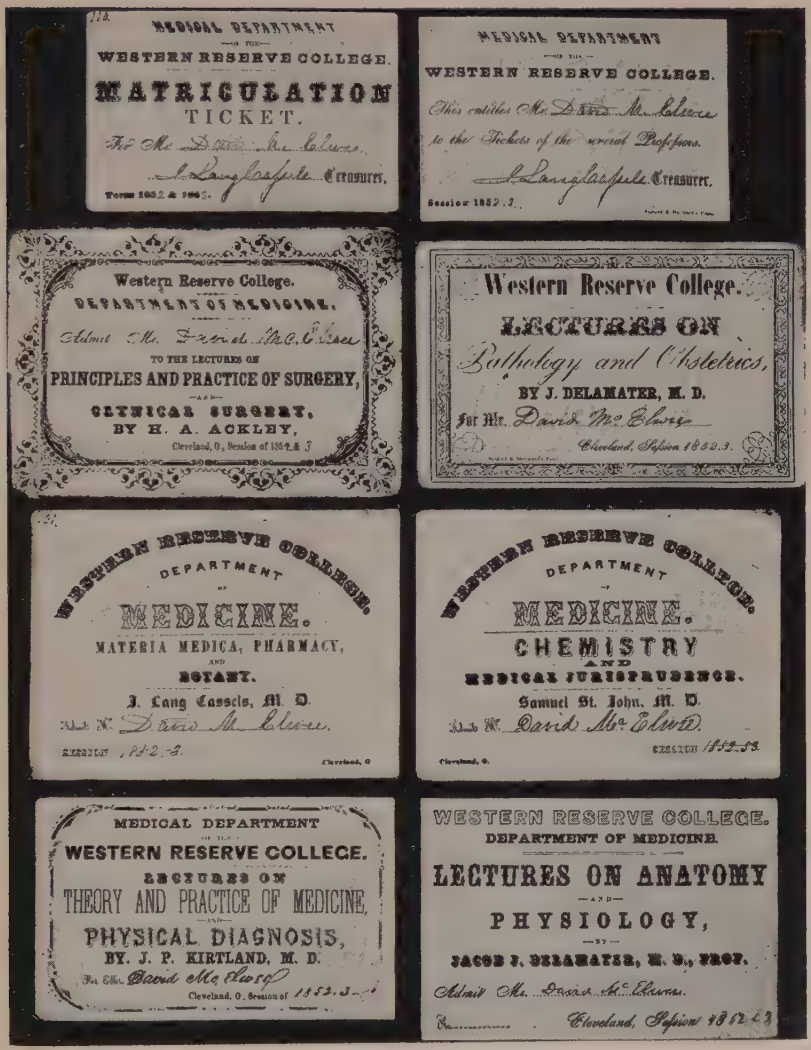
Provision for the vacancy in the teaching of surgery could not be made within the faculty. The professorship of surgery was first offered to Dr. Edward Mott Moore, of Rochester, New York, and then to Dr. Frank Hastings Hamilton, of Buffalo, New York. These two were the most prominent surgeons in New York state outside of New York City. Both were men of extensive education and both had occupied professorships in several medical colleges. Dr. Hamilton was an author and at this time president of the New York State Medical Society. Although neither accepted, they are mentioned to show that the medical faculty at Cleveland was seeking the highest type of a man to fill the vacancy. The history of medical education in Cleveland during the next forty years might have been far different if either of them had accepted.

A few weeks after the newspapers had carried notices of the resignation of Dr. Ackley in February 1856, Dr. Gustav Carl

Erich Weber, a physician practicing in New York City, when passing through Cleveland stopped off to apply for the vacancy, after the European custom. Little attention was given to the application of this man unknown in American medical education or practice.

Although both Dr. Moore and Dr. Hamilton had declined appointment before the annual meeting of the trustees in July, the name of this applicant was not presented to that meeting, showing that in mid-July the medical faculty was not ready to recommend him. However, in August, with the opening of the session only ten weeks away, and with arrival of the time for issuance of the annual circular, the important professorship of surgery was still vacant, and students were not likely to be attracted to an institution that had no provision for teaching surgery. Therefore on August 18, 1856 the medical faculty recommended to the Prudential Committee of the Board of Trustees the appointment of Dr. Weber as Professor of Surgery "for the ensuing year." This language shows hesitancy and uncertainty, because usually professors were given permanent appointments. He had little previous experience in surgical practice and none in teaching. Thus in an emergency an unknown physician was introduced to Cleveland, who influenced medical education in Cleveland more than any other one individual in the latter half of the nineteenth century. A year later he was given a permanent appointment and continued in it until 1863, when he was dismissed by unanimous action of the faculty and trustees. A sketch of his career is postponed to chapter XVIII.

The declining health of Dr. John Delamater brought the appointment in 1856 of an adjunct professor of midwifery and diseases of women and children to assist him. The man chosen was Dr. Henry Kirke Cushing, a native of Massachusetts who had been a resident of Cleveland since boyhood. He was a graduate in arts at Union College in 1848 and had attended two sessions in the Medical Department of Western Reserve College and then had been graduated in medicine at the University of Pennsylvania in 1851. He had been in practice in Cleveland



FULL SET OF TICKETS OF 1852-1853

for five years when appointed to the faculty. There were no further changes in the faculty until February 1861.

Compensation of Teachers

The divergence of medical education in several respects from all other current types of education has already been mentioned. A further divergence was in the method of compensation of medical teachers. In all other educational institutions the teachers received a salary the amount of which was fixed before teaching began. In medical education a different method was universal.

The students paid their fees to the treasurer of the faculty. The faculty directed this officer to pay items of overhead expense such as for fuel, wages of the janitor, publication of the circular and catalogue, advertising, replacement of equipment and repairs to the building during the session. After all general expenses were paid, including those of Commencement, a net income from operation remained. From this often had to be paid interest on a building debt and a sum for the reduction of debt.

Shortly after the close of each session each medical faculty held what was called the annual meeting, to apportion the balance of income among the several teachers. This was done according to a formula adopted each year under which each teacher received a definite fraction of the amount to be divided, an incident colloquially called "division of the spoils."

Not all of the allotted amount was paid in money in this apportionment of compensation. The faculty treasurer always had among his receipts many notes of students of varying probability of payment. These were counted at face value in the apportionment, but due to the varying probability of payment were distributed to the professors by lot. Each receiver of a student's note then had to collect it personally if he could, or exchange with some colleague who felt he could collect it. In such exchange the amount was often discounted so that "note shaving" became an auxiliary feature of medical teaching.

The first factor in the formula of apportionment was based

upon the number of lectures which each teacher had been scheduled to give. However, some teachers did not meet all their appointments and a colleague had to substitute so that instruction should be fully given. This meant a deduction for the delinquent and an addition for the substitute, apparently a simple calculation until disputes arose as to authenticity of the record of substitutions.

Next came the most troublesome factor. In many medical faculties one or more members claimed that his personal reputation as a practitioner was a greater attraction in bringing students than was the reputation of some of his fellow faculty members. He claimed that therefore his rate of compensation for each lecture should be increased above the average. His colleagues were not always agreed as to the greater reputation of this claimant and often refused a higher rate. This led to acrimonious debate as to the relative professional reputation of the several members, in which accusations of irregularity in practice often arose. Records show that on occasion in some faculties the result was fisticuffs in the faculty meeting, which broke up in disorder.

The records of the Medical Department of Western Reserve College show that no annual meeting was prolonged before that at the end of the session of 1856-57, the first for Dr. Weber. After that time, in several years the meeting had to be adjourned because of failure to reach an agreement, and in one case the record shows that the evening meeting continued until after sunrise.

It is a well-known fact that many quarrels arose in medical faculties in all parts of the country in the nineteenth century, far more than in any other type of teaching body. These frequently brought such serious dissensions that rival institutions were established. Although there were other causes of this quarrelsomeness among medical teachers, the method of dividing compensation was a potent cause of initiation of dissension, especially the use of the differential factor based on claimed greater professional reputation.

This method of compensation prevailed at the Medical De-

partment of Western Reserve College for exactly fifty years. The first salaries were paid to professors in 1893-94. Some subordinate assistants had received salaries before that year. The number of subordinates was small before 1880, usually only one demonstrator of anatomy.

An erroneous impression existed that medical professors received large incomes from division of the spoils. The major compensation was intangible and came from enhanced professional reputation because of being a professor, from calls to consultation, from cases referred by former students, and, in a few institutions, from returns from sale of textbooks.

The accounting of the division of spoils at the Medical Department of Western Reserve College is recorded for only twenty of the later years of the first half century. In these records the largest amount paid to any one individual in one year is less than $900.

The high-water mark of attendance and income from students in the nineteenth century was the session of 1849-50, with 255 students enrolled and a total income from them of about $15,000. General expenses, some concessions on tuition to individuals, such as clergymen, and some payment on the debt reduced this to an amount which on division among the six professors gave an average of about $1,500 including the notes of students received by each one. It was a different story when the attendance fell to twenty in 1864-65 and the professors had to contribute from private funds to keep the institution in operation.

Summary

The first period laid the foundation for a hundred years of service of the present School of Medicine of Western Reserve University. The policy of a high standard of teaching, which has characterized the institution throughout its career, was established. This high standard followed the policy nurtured in the undergraduate department at Hudson from its beginning in 1826.

Several educational procedures now unfamiliar have needed

description in order to make the story intelligible to the modern reader. Some of the educational policies adopted at the outset are important features because they were in advance of most of the medical colleges of that era. Among these were: the requirement of an examination in practical anatomy for the medical degree, clinical instruction in the curriculum, and the conduct of a college hospital, however crude, before other hospital facilities became available in Cleveland.

The general acknowledgment of the high capability of the medical faculty gave the institution a high reputation with the medical profession of the entire country, a reputation which sustained it during the difficulties of the second period.

The dissension in the college of arts from 1850 to 1855 had serious effects in the medical department in addition to reducing the attendance. It caused a division in the medical faculty on the question of the support of President Pierce, which was the first disagreement in that faculty.

The medical department had been founded early in the administration of President Pierce, and he did much to promote its interests. He was interested in science and in medicine, and his eldest son was graduated at the medical department in 1848. The majority of the medical faculty supported President Pierce during the controversy in the departments at Hudson. However, Dr. St. John and Dr. Ackley opposed him, and this division in the medical faculty was one factor in the resignation of these two men in 1856.

When President Pierce was succeeded by President Hitchcock in 1855, the new president, having little interest in science or medicine, gave scant attention to the medical department.

Another factor in the later years of the first period was the increasing age and declining health of Dr. John Delamater. He wished to resign in 1854 when he was sixty-seven years of age. His colleagues dissuaded him from his purpose. He repeated the request in 1856, when has was again persuaded to continue, although with diminishing vigor. He was given an assistant to carry the larger part of his teaching. Finally, at the age of seventy-four, his health forced him to resign his place in

the medical faculty. His son resigned at the same time. The resignations of Dr. John Delamater and Dr. Jacob Delamater in February 1861 were the closing events of the first period. This left only Dr. Cassels and Dr. Kirtland of the original faculty for the difficult task that was to confront the institution in the second period. The outbreak of the Civil War came six weeks after the resignation of the father and son who had been important factors in the institution from its beginning.

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VIII

ADVERSITY AND RECOVERY: 1861-1881

THE HAPPENINGS from the beginning of the Civil War until the union of the faculties of the Medical Department of Western Reserve University and of the Medical Department of the University of Wooster are related in this chapter. These twenty years included the most critical period in the history of the institution. The Civil War reduced attendance and also made it difficult to maintain an effective teaching staff, and local conditions affected the institution adversely. Recovery, which began in 1867, progressed slowly until 1871, in which year marked improvement began.

Effects of the Civil War

The Mexican War had little effect upon the Medical Department of Western Reserve College. The number of young men resident in Ohio who entered the army was not over 3,000. The medical college had graduated only ninety-six men before the war began. I have found record of only two of these who were surgeons in that war.

The Civil War, in contrast, had a profound effect on the fortunes of this medical college. It lasted twice as many years as the Mexican War. Over two hundred Ohio regiments were organized, each of about eight hundred men. Although these included reenlistments, well over 100,000 men resident in Ohio entered the army, the majority of them at the age at which young men began the study of medicine. As a result the medical colleges of Ohio had a marked decrease in enrollment.

The Medical Department of Western Reserve College had granted 860 degrees of Doctor of Medicine before the Civil War began. A record that is known to be incomplete shows that 270 of these men received commissions as surgeons or assistant surgeons in the army, over thirty per cent. Over 1,100 men had attended this medical college before the Civil War without being graduated, although some were graduated at other

medical colleges. Fragmentary records of this group show over fifty who received commissions in the army. A considerable additional number of graduates and former students are recorded as contract surgeons. I estimate from this incomplete record that about 400 men who had been students in this medical college gave medical and surgical service in the army.

Building and Equipment

Little change occurred in the building until 1880, when a thorough renovation, with minor structural changes, was made. The decision to move the undergraduate department from Hudson to Cleveland had been announced and the repairs in the medical building were in anticipation of closer relations between the collegiate and medical departments.

Changes in equipment were minor. Teaching equipment was replaced when worn out and some additions were made to the library. Dr. Cassels personally owned the equipment which he used both in demonstration in teaching chemistry and also in his private work in commercial chemical analysis. He resigned in 1873 when seriously ill. He recovered enough after a year to resume his private work and then established a laboratory elsewhere and removed his equipment from the medical building. Mr. Morley needed equipment for demonstration and for the optional laboratory course which he offered. In October 1874, $200 was expended for chemical equipment. This was the largest single expenditure for equipment since the medical college was founded. It was not entirely adequate, and on each day that Mr. Morley came from Hudson to give instruction, he brought additional equipment from the chemical laboratory of the collegiate department, a procedure continued throughout the years that Mr. Morley was a member of the medical faculty. After the death of Dr. Cassels in 1879, his daughter presented to the medical college all of his chemical equipment.

A lime-light stereopticon was purchased in 1876 for $150. I have found no record of acquisition of other optical equipment, although references, beginning in the early 'seventies, to micro-

scropical demonstrations indicate that members of its faculty owned one or more microscopes.

Change in Length of Session

Throughout the first period the length of session was sixteen weeks except in the sessions of 1853-54 and 1854-55 when the length was eighteen weeks. In 1864-65 an additional week was added for examinations, permitting sixteen weeks of instruction instead of fifteen weeks as formerly. The session was increased to twenty weeks, including examinations, beginning in 1871-72 (Appendix G). This lengthening of the session received favorable public comment as a definite advance in medical education at a time when nearly all medical colleges restricted their sessions to the traditional sixteen weeks. Two years later, in 1872, a further advance was made by inauguration of an optional supplementary term of twelve weeks beginning about April 1 of each year. The instruction included lectures, clinics, and recitations, with an emphasis on quizzes. This optional term was at times called "spring term" and at other times "summer session." It continued until 1894 when the regular session was increased to thirty-two weeks, including a vacation of two weeks.

The adoption of a regular session of twenty weeks by this medical college had an influence when the Association of American Medical Colleges was organized in 1877. This Association in Section 2 of Article II of its Articles of Confederation stated: "Said regular session shall be not less than twenty weeks. This section to go into force with the session of 1879-80." The Medical Department of Western Reserve College immediately further increased its regular session to twenty-four weeks beginning in 1877-78 (Appendix G). Thus this medical college was a leader in increasing the length of the required session, and also was one of the first to provide an additional optional term.

Development of the Curriculum

The advances in this institution included division of some of the composite professorships that contained two or more

subjects. This brought the introduction of several new professorships, some of them being in subjects now considered medical and surgical specialties.

In 1861 part of chemistry was designated as toxicology and for the following twenty years a professorship of chemistry and toxicology existed. In 1863 physiology was divorced from its associated anatomy with establishment of a professorship of physiology. Anatomy was again combined with physiology during the session of 1864-65. In 1865-66 a separate professorship of anatomy was established and the subject of histology was combined with physiology under the designation of a professorship of physiology and histology.

This was the first appearance of the word "histology" in a teaching title in this medical college. Histology was associated with physiology in teaching in Great Britain, and this British relationship was copied when the professorship of physiology and histology was created in Cleveland in 1865.

The word "pathology" had appeared in teaching titles beginning with the founding of the medical college in 1843, at first associated with physical diagnosis. The subjects were divided in 1847, when the designation "general pathology" was attached to a clinical professorship until 1856. This was gross pathology, later called pathological anatomy. Neither the word "pathology" nor its adjective appeared in any active teaching title from 1856 until 1873, although the catalogues constantly mentioned the department of pathology and the pathological museum. The professorship of physiology and histology was extended in 1873 to physiology, physiological and pathological histology, indicating that the histology taught before that time had been normal histology.

Physical diagnosis disappeared from teaching titles in 1856, reappeared from 1861 to 1865, and then was not again found in a teaching title until 1895. However, the subject was constantly taught under the professorship of medicine and was announced as a separate subject of examination in 1880 in the optional graded course.

The segregation of subjects was most marked in connection

with surgery. In conformity with a policy adopted in nearly all medical colleges during the Civil War, a special course in military surgery was begun in 1862 and continued until the end of the war. The content of this course included military hygiene, army diseases, military surgery, and the routine duties of an army surgeon in the field. Appropriate cases in the army hospital in Cleveland were shown to students. The director of this hospital gave the course under orders of the Surgeon General of the Army.

The course in principles and practice of surgery had given some attention to several subjects later called surgical specialties. The first recognition of a surgical specialty by a separate title came in 1865 with appointment of a professor of ophthalmic medicine. This course was continued until 1871, when it was enlarged to ophthalmology and otology, and in 1873 it was further extended to a professorship of ophthalmology, otology, and laryngology.

A lecturer on urinary diseases was appointed in 1872, but this subject was not advanced to a professorship until 1890. A lecturer in oral surgery and dental pathology was named in 1874 and advanced to a professorship in 1875. This was continued until 1881. Thus in ten years six different surgical specialties had been recognized by appointment of lecturers or professors. Operative surgery on the cadaver was taught at least as early as 1852, and probably before. In some years this subject was included in a teaching title with some other subject. The first title of this subject alone came in 1870.

The existence of a professorship of oral surgery and dental pathology in this school from 1875 to 1881 is of historical significance. A lecturer on dental pathology and dentistry had been named in a few medical colleges, the first I have found being in 1866. However, in no other medical faculty that I have found was dentistry recognized by a professorship. After much search I conclude that the first professor of a dental subject in any American medical faculty was in the Medical Department of Western Reserve College in 1875.

The catalogues in the early 'seventies mentioned the use of

the manikin in teaching obstetrics. In 1872 and thereafter the catalogue states that obstetrical cases would be furnished to such students as desired them. The traditional association of obstetrics and diseases of women in a single professorship was severed in 1878 when obstetrics was attached to diseases of children and a separate professorship of gynecology established, the first time the word "gynecology" appeared to replace the old term, "diseases of women."

Diseases of children were taught in a composite professorship with obstetrics and diseases of women until 1874, when a lecturer on diseases of children was appointed and raised to a professorship a year later. This was the first separate appointment in a medical specialty. Three years later obstetrics was attached to diseases of children. Dermatology, which had been taught in connection with medicine, was first recognized as a separate medical specialty in 1880 with appointment of a lecturer on diseases of the skin. Thus two medical specialities and six surgical specialities appeared with separate titles before 1881.

Anatomy was in a composite professorship of anatomy and physiology until 1865—with the exception of the year 1863-64 when it was associated with surgery in an emergency. In 1865 a separate professor of anatomy was first appointed.

The amount of instruction in the several subjects received no definite statement until 1876. The major subjects were taught throughout the session, while some subjects were taught during only part of the session. As an example, in the 'sixties the course in physiology was given as five lectures each week during the first six weeks of the session, a total of thirty hours or less than six per cent of the entire curriculum.

The only source of information concerning the amount of instruction in the several subjects before 1876 is the "time cards" or schedule of lectures. These are helpful only in those cases where a man taught only one subject, because the entries are not of subjects but of teachers and lack information of the proportion of time given to his several subjects by a man holding a composite professorship.

The first published schedule naming subjects was for 1876-

77, when the number of hours per week were as follows: Anatomy, 5; Dissection, 8; Chemistry and Toxicology, 3; Physiology, Physiological and Pathological Histology, 3; Materia Medica, Pharmacy, and Therapeutics, 5; Medicine, 5; Diseases of Children, 1; Surgery, 4; Ophthalmology, Otology, and Laryngology, 3; Oral Surgery and Dental Pathology, 1; Obstetrics and Diseases of Women and Infants, 3; Medical Jurisprudence, 1; Clinics, 8; Total, 45. In 1876-1877 the length of session was twenty weeks; the time was increased to twenty-four weeks the next year when, with forty-five hours per week, the total curriculum became 1,080 hours for the session.

The clinics were devoted mainly to general medicine and general surgery. The work in dissection was the only required work of a laboratory nature. In 1868 Dr. Cassels introduced an optional laboratory course in qualitative chemical analysis which was available to only a small group each year because of limitation of space and equipment. This was continued by Mr. Morley when he succeeded Dr. Cassels in 1873. Private letters of Mr. Morley show that nine students took this course in 1873-74, that the course was not given in 1874-75 or 1875-76, while eleven students took the course in 1877-78. It continued to be offered until the adoption of required laboratory work in chemistry in 1888, although not given every year. In addition to dissection, this optional course was the only offering of laboratory instruction until 1887.

Some minor features of the curriculum merit mention. The statement is made in the catalogue beginning in 1870 that instruction in the use of the microscope was given, and beginning in 1874, that microscopical demonstrations are offered, although no laboratory course in a microscopical subject was offered until 1887.

The use of the clinical thermometer was begun by a few physicians in Germany in 1851, and in the middle 'sixties this use was described in some textbooks printed in the English language. The use of this instrument by a few physicians in the vicinity of Cleveland in the early 'sixties was met by the derisive remarks of their colleagues that a competent physician should

be able to recognize a fever without a thermometer. The catalogues from 1863 to 1866 are not available, but in the catalogue printed in 1867 appears the statement: "The thermometry of disease will be fully illustrated in connection with the course in the principles and practice of medicine." Thus the use of the clinical thermometer was taught in Cleveland not later than three years after it was first described in English textbooks.

The outstanding book on the subject appeared in 1868.[1] Dr. John C. Reeve, an alumnus of this medical college, published a review of this book in 1869 which covered twenty pages.[2] Later Dr. Reeve wrote that this was the first discussion of thermometry in American medical literature.[3]

A change in the traditional method of examinations came in 1879 when all candidates for graduation were required to take written examinations in all subjects. In early years all examinations were oral. Written examinations in chemistry began early and extended gradually to a few other subjects. The requirement in all subjects was considered an advance because under it all students responded to the same questions, something that could not be accomplished under a plan of oral examinations. Those students who enrolled in the optional graded course took written examinations in specified subjects at the end of each of the three years of the graded course. The students in the old repetitive course took examinations only when they applied for graduation.

Clinical Facilities

One medical and one surgical clinic had been held each week at the medical college since its origin in 1843. The Marine Hospital was opened in 1852. Its director was at times a member of the faculty and usually an alumnus of the Medical Department of Western Reserve College and gave weekly clinics to which were admitted selected students of the medical college. However, the instruction in this hospital was not a part of the regular curriculum until the building was leased by the Cleveland City Hospital Society in 1875.

Charity Hospital was built in the early 'sixties. The members of the faculty and the friends of the medical college were active in raising funds for its erection and an agreement was made by the bishop of the diocese that when the hospital was opened the staff would contain members of the medical faculty and the clinical material would be available for teaching. No record has been found of the reasons given for the abrogation of this agreement. However, when this hospital was opened a man was appointed as chief of staff who was unfriendly to the medical college, and members of the Reserve medical faculty were denied teaching privileges.

The City Infirmary was under control of the city physician, who was an alumnus of the medical college after 1864. He made the clinical material available for teaching. However, since the institution was an almshouse rather than a hospital, the cases were mostly chronic.

At a meeting of citizens in May 1866 the Cleveland City Hospital Society was organized and soon incorporated. A subsidiary, the Wilson Street Hospital Association, was organized in April 1868. A building was acquired, and a hospital of twenty beds opened in July 1868, and was increased to thirty beds a year later. This institution was familiarly called the Wilson Street Hospital from its location, although its correct name from the beginning was the Cleveland City Hospital. At no time was it supported or controlled by the municipality. Its location was on Wilson (now Davenport) Street north of St. Clair Street and near the present East Twelfth Street.

The catalogue published in the spring of 1867 said: "The patients of the City Hospital—averaging from 150 to 200—are exclusively at the control of this Faculty, which afford a great variety of interesting and instructive cases." The number of patients refers to the total number of different patients in a year, the method then used in hospital statistics.

This hospital was soon overcrowded and plans for building were made but not carried through. The Marine Hospital was larger than needed for care of sailors after the patients resulting from the Civil War diminished. The Cleveland City Hos-

pital Society on October 1, 1875, leased the building at a nominal rental and abandoned its property on Wilson Street. This became the chief teaching hospital of the medical department. In 1880 an amphitheater was added and also a children's ward, a contagious ward, and a pathological room were established.

In March 1876 the faculty established an additional charge to each student of $5.00 for a "hospital ticket" which admitted students to the clinics at the hospitals. The total receipts from this fee were paid to the hospitals in return for teaching privileges. Clinics continued to be given both at the medical college building and at the hospitals.

The arrangement by which the Reserve faculty had sole privileges at Cleveland City Hospital and the Wooster faculty at Charity Hospital was changed in 1878 so that each faculty had limited privileges at the hospital controlled by the other faculty, and students to some extent attended clinics given by professors of the faculty of the college in which the student was not enrolled.

Throughout these twenty years the medical faculty conducted a dispensary service for ambulatory patients, in the early years at the medical college building and after 1875 at Cleveland City Hospital. The result of these developments was that the clinical facilities of the medical college were steadily improved so that by 1881 the patients available for teaching were many times those available in 1861.

Financial Matters

The only source of income of the medical department was from the fees paid by students for tickets and for graduation. The theoretical total income for each year can be computed from the known number of students enrolled, the number of graduates, and the schedule of fees. Such a computation would be made on the assumption that all students paid full fees. The result exceeds the actual income because it is known that in some cases fees were reduced or entirely remitted.

The apparent income for 1861-62, the first year of the period considered in this chapter, was approximately $6,000. Decrease of attendance during the Civil War brought a corresponding diminution of income until in 1864-65 it was less than $1,700.

The question of student fees was much under discussion in middle western medical colleges during the 'sixties and 'seventies. A meeting of deans of about twenty middle western medical colleges was held in Cincinnati in 1866 in an attempt to adopt a standard fee. No agreement was reached because the Medical Department of the University of Michigan charged no fees. Much complaint was made of low attendance alleged to be due to students being drawn to Ann Arbor by the attraction of free tuition. This is the probable reason for a new policy on fees which began at the Medical Department of Western Reserve College in 1867. The fee for tickets was abolished and the only charge was "a matriculation fee only sufficient to meet the contingent fees of the college. . . ." The amount was $25 or $30 in different years. An additional graduation fee was charged continuously. This was $20 in the early years, then $25, and was increased to $30 in 1872.

The abolition of the fee for tickets, which prevailed until 1873, meant that the teachers received no direct financial compensation. This brought difficulty in securing teachers and also resulted in irregularity in the attendance of the teachers on their scheduled instruction.

A new administration began in 1873 and the ticket fee was restored. However, while the fees of the early 'sixties were $60 for tickets plus $10 for other fees, the schedule adopted in 1873 was $40 for the general ticket plus a matriculation fee and a dissection fee each of $5.00, a total charge of $50 for each student for each session.

The faculty endeavored several times in the 'seventies to secure an agreement with neighboring medical colleges of the Middle West to set a standard charge of $75. These efforts were unsuccessful and the fees were not increased to $75 until 1887. Meanwhile the standard fee in eastern medical colleges was

$100. The low fees of the 'seventies were related to the financial depression that began in 1873.

After the general ticket fee was restored the annual income ranged from $3,600 in 1873-74 to $5,400 in 1875-76, a sum not exceeded until 1880-81, when the income was over $7,300.

Records are preserved of the distribution of the surplus to the teachers on the basis of number of hours which each had taught in all sessions from 1873-74 to 1880-81. The largest amount received by any one teacher in any one of these years was $554 received by a professor in a major subject who had lectured each day during twenty-four weeks, a total of 144 hours, or a rate of less than $4 per lecture. The rate per lecture varied in different years depending upon the income. The officers of the faculty received no stipend in addition to that for their teaching.

Two large expenditures continued throughout. The first was the annual interest on the mortgage of $5,000, which was $400 until 1880-81 when it was reduced in rate to $300. The second large expenditure was the perquisite paid to the president of $5.00 for each diploma that he issued. This ranged from $70 to $310 per year, depending upon the number of graduates.

The annual overhead expense amounted to a considerable sum, including advertising, printing and catalogues—suspended for a few years in the 'sixties—the expenses of censors, teaching supplies, maintenance of the teaching equipment and the building, fuel, light, wages of the janitor, and special taxes for sewers and paving. In the summer of 1880 about $1,400 was expended for repairs.

It is probable that the income in some years in the 'sixties and early 'seventies was not sufficient to maintain the institution although the teachers received no compensation. No financial records have been found for the twelve years that Dr. Cassels was dean. He was also treasurer of the faculty during the greater part of his administration and probably paid any deficits from his private purse. He had acquired considerable wealth through interests in manufacturing concerns given him

in return for his services in commercial chemistry and geological explorations for mineral deposits. When he died in 1879, the inventory of his estate was $125,000.

Attendance of Students

Enrollment, which had decreased in the 'fifties, began to increase in 1860-61. The Civil War caused another decrease accentuated by the establishment in 1864 of a rival regular medical college in Cleveland. In 1864-65 the enrollment was only about twenty, the lowest in the history of the institution. Two years later, in 1866-67, the attendance was 119, the largest since 1853, and the largest in the period discussed in this chapter. This was due to enrollment of men who had been deterred by military service from continuing their medical course or from beginning it. This increase did not come in the first year after the close of the war because students ordinarily studied with a preceptor for one year before entering a medical college.

The enlarged hospital facilities acquired when the Cleveland City Hospital occupied the building of the Marine Hospital in 1875, accompanied by enlargement and strengthening of the faculty, increased attendance. Another increase came in 1880-81, when it had become known that the undergraduate department of Western Reserve College would soon be moved to Cleveland (Appendix H).

The Medical Department of Western Reserve College had refused the admission of women after 1856 until 1879 when it again admitted them. However, few women entered.

Changes in the Teaching Staff

The many details in this section of this chapter are inserted because there has been a paucity of information concerning the teaching staff in the period here discussed. The record book contains no faculty minutes from February 1862 to February 1868. The records of the trustees contain few references to the medical department in the 'sixties when the relation of the

trustees to their medical department was tenuous. No catalogues of the medical department are available between 1863 and 1867 and probably none was published in these three years. The lists of medical teachers do not appear in the catalogue of the undergraduate department in these years. The lists of the former members of the medical faculty which were published in 1879 and in 1895 omit the names of several men and carry erroneous dates.

After extensive search of such collateral sources as medical journals, newspapers, city directories, obituaries, and personal letters, I have compiled what I believe to be a complete list of the teaching staff. These details serve to introduce several men who had a prominent part in the progress of the institution in the latter part of the nineteenth century, three of whom became deans.

The Board of Trustees in 1856 designated six professorships in the medical faculty as follows: Anatomy and Physiology; Chemistry and Botany; Materia Medica, Therapeutics, and Medical Jurisprudence; Principles and Practice of Medicine; Principles and Practice of Surgery; Obstetrics and Diseases of Women and Children. In addition the Board appointed an adjunct professor to the professorship last named to assist Dr. John Delamater, then in failing health. Besides these appointments by the trustees, the faculty annually named a demonstrator of anatomy.

Many changes occurred in the second period in grouping of subjects, division of some of the composite professorships, introduction of new subjects with separate appointees, and changes in terminology of subjects. The result was that in comparison to six professorships, an adjunct professorship, and a demonstratorship of anatomy that existed in the final year (1860-61) of the first period, the final year (1880-81) of the second period found ten professorships, three lectureships, and a demonstratorship of anatomy. The terminology of titles was in no case, except for the demonstratorship, exactly the same as twenty years earlier.

The first period was characterized by stability in the faculty.

In eighteen years only ten different individuals held a title above that of demonstrator. Nine of these were professors and four of them taught throughout the eighteen years. There were five different demonstrators of anatomy, making a total of fifteen men who taught in the first period.

In contrast thirty-two different men taught in the next twenty years, of whom twenty-four reached the title of professor. Only one—Dr. Thayer—taught throughout the twenty years, and only eight served as many as ten of these twenty years.

The instability of the faculty was more marked from 1861 to 1871 than in any other decade of the history of the medical college. This arose from the fact that many men were occupied by the war. In addition the critical condition of the institution during the several years, when the teachers received no money recompense, made it difficult to secure competent teachers. Therefore several young and inexperienced men were appointed whose success was so meager that they had to be replaced.

Five teachers were carried over from the first period to the second period, namely: Dr. Cassels, Dr. Cushing, Dr. Kirtland, Dr. Thayer, and Dr. Weber. Dr. John Delamater resigned in February 1861 and Dr. Cushing was promoted to the professorship from the adjunct professorship which he had occupied for five years. Dr. Jacob Delamater also resigned at this time. One of the subjects which he had been teaching—medical jurisprudence—was taken by Dr. Cushing and the other subjects —materia medica and therapeutics—were assigned to Dr. Alleyne Maynard, who became Professor of Materia Medica and Physical Diagnosis. Dr. Maynard, born in Barbados, the son of an English clergyman, was educated in Great Britain and was graduated in medicine at the University of Edinburgh. He began practice in Cleveland before 1850 and was one of the leading physicians of the city.

The next change came two years later in a major subject. Dr. Weber, who had been Professor of Principles and Practice of Surgery since 1856, accepted appointment in January 1862 on the staff of the governor of Ohio with the title of

Surgeon General of Ohio.[4] He resigned after ten months.[5] He then made a trip to Europe. He did no teaching in the session of 1861-62 after December, and none in the session of 1862-63, the work of his professorship being carried by Dr. Cushing and Dr. Thayer.

The medical faculty took the opportunity to relieve Dr. Weber of his professorship because he was little in favor with the other members of the faculty. They adopted a method frequently used in medical colleges in the nineteenth century when it was desired to get rid of a man; they abolished his professorship. The medical faculty recommended to the Board of Trustees on April 15, 1863, that the professorship held by Dr. Weber be abolished, with division of its subject matter, attaching the principles of surgery to the professorship held by Dr. Cushing and the practice of surgery to the professorship occupied by Dr. Thayer.

The Board of Trustees, in the original articles of agreement of 1844, had left to the medical faculty the arrangement and conduct of the teaching, a policy followed for twenty years. However, Dr. Weber on his return from Europe, appealed to the trustees to reverse the recommendation of the medical faculty.

The trustees convened on May 13, 1863, in a special meeting at Cleveland to consider the question. Dr. Weber could not be present; therefore an adjournment was taken until May 27, when Dr. Weber and members of the faculty appeared before the trustees. Dr. Weber vigorously opposed the action. The trustees decided that "the number and character of the professorships should be determined and regulated by the medical faculty in accordance with usage heretofore uniformly adopted by the Board. . . ." They further voted that in their opinion "harmony among the faculty is indispensable to the prosperity of the medical department, and that such harmony can be secured only by complying with the request of the faculty. . . ." This action had an outcome of serious nature to be discussed in chapter XIII.

The attachment of the practice of surgery to the professorship of anatomy and physiology held by Dr. Thayer, gave him more

teaching than he could carry. Therefore he was designated as Professor of Anatomy and Surgery and a professorship of physiology was established by the trustees. Likewise the attachment of principles of surgery to the professorship of obstetrics, diseases of women and children, and medical jurisprudence held by Dr. Cushing overloaded him and he was relieved of teaching diseases of children.

Dr. David H. Scott was appointed Professor of Physiology and Diseases of Children, a title that he held for the year 1863-64 only. Dr. Scott was a graduate in arts at Jefferson College in 1853 and in medicine at the Medical Department of Western Reserve College in 1855. He attended the College of Physicians and Surgeons of New York City in 1855-56 and then began practice in Chillicothe, Ohio, where he was engaged when appointed as a professor. He removed to Cleveland in 1863. Dr. Scott was a well-educated man and a capable practitioner and teacher.

Dr. Kirtland, having reached the age of seventy years, offered his resignation in April 1863. However, because of the disturbance in the teaching of surgery, the trustees felt that he, the oldest member of the faculty, should be retained, and upon solicitation of a special committee of the trustees Dr. Kirtland withdrew his resignation. He offered his resignation again in July 1864 when it was accepted because of "failing health" and he was made an emeritus professor. He had given twenty-one years of efficient service in the professorship of medicine. His resignation left only Dr. Cassels active of the seven founders of the institution.

Dr. David Scott, having successfully taught physiology and diseases of children for one session, was made Professor of Principles and Practices of Medicine to succeed Dr. Kirtland. The teaching of diseases of children was returned to Dr. Cushing, while Dr. Thayer assumed the teaching of all of surgery under the unusual title of Professor of the Art and Science of Surgery. Dr. Thayer at this time stopped teaching anatomy, which he had carried since 1856. This left anatomy and physiology unassigned. These vacancies were filled by a new man

who had much influence in the medical college after 1870 and became dean. Dr. Isaac Newton Himes was appointed Professor of Anatomy and Physiology in 1864 and served one year. A sketch of his career is given in chapter XVIII.

The year 1864-65 was a critical time in the medical college. A rival regular medical college was organized in 1864 and definite attempt was made to disrupt and destroy the Medical Department of Western Reserve College. A report was published in the newspapers that the older medical college was about to close and be absorbed by its rival.[6] This report was publicly and vigorously denied by the officials of the older institution. Nevertheless, dissension arose in its faculty and in March 1865 both Dr. Cushing and Dr. Maynard resigned. The resignations were accepted by the trustees with a minute saying: "We regret to learn that such a state of things exists within the medical department as to induce the resignations of Dr. Maynard and Dr. Cushing. . . ." Soon after, Dr. Himes resigned.

The professorship held by Dr. Maynard for four years had included materia medica and physical diagnosis. The latter phrase was dropped and Dr. Dudley Allen was appointed Professor of Materia Medica. He was a graduate in arts at Western Reserve College in 1832 and in medicine at Jefferson Medical College in 1837 and at this time was fifty-one years of age. He was a son of Dr. Peter Allen, a pioneer physician of the Western Reserve, and had practiced with his father for more than twenty-five years at Kinsman until removal to Oberlin to educate his children, one of whom was later a member of the medical faculty for twenty-three years.

The professorship left vacant by Dr. Cushing was divided and Dr. John Johnson Elwell was appointed Professor of Medical Jurisprudence. He had been graduated at the medical department in 1846 and had then studied law and at this time was a leading member of the Cleveland bar and a professor in the Ohio State and Union Law School of Cleveland. While teaching in the medical college he wrote a book on medical jurisprudence which was considered one of the leading treatises on the subject and went through five editions.[7]

The remaining subjects which Dr. Cushing had taught were taken by Dr. Charles Augustus Terry with the title of Professor of Obstetrics, Diseases of Women, and Diseases of Children. Dr. Terry, at this time fifty-five years of age, was a graduate of the College of Physicians and Surgeons of New York City in 1833, a man of much capability and had been a leading physician in Cleveland since 1836.

The teaching that had been done by Dr. Himes was divided. Dr. Jacob Laisy, who had been demonstrator of anatomy for two years, was promoted to a separate professorship of anatomy, the first time that this subject had appeared in a separate professorship. This was the second time that a demonstrator had been promoted to a professorship in this subject, the same procedure having occurred with Dr. Thayer in 1856. Dr. Laisy, German by birth, had been graduated in arts at Western Reserve College in 1850 and in medicine in 1853. He was attending physician at the Northern Ohio Insane Asylum from 1856 to 1858 and superintendent in 1858-59. He was a surgeon in the army from 1861 to 1863 when he became demonstrator of anatomy. His teaching service in the medical college continued for thirty-three years.

The teaching of physiology was assigned to a new member of the faculty, Dr. John C. Ferguson, as Professor of Physiology. He was graduated in arts at Union College in 1851 and then taught for ten years in secondary schools, which period was followed by study of medicine and graduation at the Medical Department of Western Reserve College in 1863. After two years of service as a surgeon in the army he settled for practice in Cleveland, and was appointed within a few months to the teaching position.

Teaching of ophthalmology had become more prominent in eastern medical colleges in recent years and to meet this advance Dr. Azariah Everett was appointed in 1865 as Professor of Ophthalmic Medicine and Demonstrator in Operative Surgery. He was a graduate of Jefferson Medical College in 1846 and in that year began practice in Cleveland. He had abridged his practice and was extensively interested in business enterprises.

Thus between February and November 1865 three professors resigned and five were appointed.

Another series of changes came in 1866. Dr. Allen found the travel between Oberlin and Cleveland, necessary to teach his subject, burdensome, and resigned after one session. He was replaced in the professorship of materia medica by Dr. Ephraim Lynch King, a graduate of the medical college in 1861 and a surgeon in the army throughout the Civil War.

Dr. Ferguson was in ill health and resigned after one session of teaching physiology and died soon after. He was replaced by Dr. John Bennitt, an alumnus of the class of 1855, an army surgeon through the Civil War, and in 1866 in practice in Michigan. He removed to Cleveland and began a teaching service that extended to his death in 1892 and included eight years as dean. His career is sketched in chapter XVIII.

In 1867 further changes were made. Dr. David Scott, after three successful years in the chair of medicine, desired to return to his former home and practice in Chillicothe, and so he resigned. He was replaced by Dr. Bennitt, promoted from teaching physiology to medicine as had occurred with Dr. Scott three years earlier. His place was taken by appointment of Dr. Joseph Thatcher Woods as Professor of Physiology and Histology. Dr. Woods was a graduate in medicine at the University of Michigan in 1855, and after service as a surgeon in the army was in practice in Toledo.

At this time Dr. Everett gave up medical practice to devote himself to business, and resigned his professorship. He became a leader in manufacturing, building of street railways, and banking. His place was taken by Dr. Milton Case Woodworth in teaching ophthalmology and operative surgery on the cadaver. Dr. Woodworth was a graduate in medicine of the University of Michigan in 1855. He had served as a surgeon in the army and was in practice in a village near Cleveland.

Dr. King, with no previous experience in teaching, was unsuccessful, and resigned after one session. His place was taken by a man who was to serve on the faculty for more than thirty years. Dr. John Eaton Darby was appointed Professor of Materia

Medica and Therapeutics. He had been graduated at Williams College in 1858 and at the Medical Department of Western Reserve College in 1861. He served throughout the Civil War as a surgeon in the army and was demonstrator of anatomy in 1866-67 after he began practice in Cleveland.

No faculty changes were made in 1868 for the first time in five years. At the end of the session of 1868-69 it became necessary to request the resignation of Dr. Woodworth because of inattention to his teaching duties. No replacement was made for a year when, in 1870, Dr. William Henry Palmer was appointed Lecturer in Ophthalmology without the attachment of operative surgery as had happened from 1865 to 1869. Dr. Palmer was a native of Cleveland and a graduate in arts at Yale College in 1864. He attended the session of 1865-66 in the medical college in Cleveland and then went to the College of Physicians and Surgeons of New York City, where he was graduated in 1867. After serving in a hospital for a year, he located in Cleveland for practice. He gave promise of a brilliant career but died in 1871 before he had completed one session of teaching, a victim of tuberculosis.

The teaching of surgical anatomy in a course of operative surgery on the cadaver had been carried on for at least twenty years as an adjunct to some other title. In 1870, for the first time, this subject was given a separate appointment when Dr. Eben J. Cutler became Lecturer on Surgical Anatomy. He was a graduate in the arts at Baldwin College in 1860 and an alumnus of the medical college in 1866.

Further reorganization of the faculty came in 1871. Dr. Woods was transferred from teaching physiology and histology to a lectureship in urinary surgery. The vacancy was filled by the return of Dr. Himes after an absence of six years, part of them spent in study in Europe. Thus he resumed a teaching service, to which was soon added administrative duties, that was to continue until his death twenty-four years later.

The vacancy arising from the death of Dr. Palmer was filled by appointment of Dr. Xenephon Christmas Scott as Lecturer on Ophthalmology and Otology. Dr. Scott was promoted a year

later to Professor of Ophthalmology, Otology, and Laryngology. He was graduated in arts at Jefferson College in 1865, and in medicine at the Medical Department of Western Reserve College in 1867. He then went to the College of Physicians and Surgeons of New York City, where he received a second degree of Doctor of Medicine in 1869. A year was spent at the Eye Hospital in Heidelberg, Germany, and another year at the New York Ophthalmic and Aural Institute. Dr. Scott was the most thoroughly trained man in these specialities in northern Ohio when he began practice in Cleveland in 1871. A year later he opened the Cleveland Eye, Ear, and Throat Institute and associated with it dispensary service at the medical college. Only students of the Medical Department of Western Reserve College were admitted to the institute and dispensary. The trustees and visiting and consulting physicians of the institute were leading laymen and physicians of the city; several of them were members of the medical faculty.

Dr. Terry was in ill health and in 1871 Dr. Frank Wells was appointed Adjunct Professor of Obstetrics and Diseases of Women and Children to assist him. When Dr. Terry died within a few months, Dr. Wells was promoted to the professorship. Dr. Wells, after having interrupted his college course by a year of service in the army, had been graduated in arts at Harvard College in 1864, and at the Harvard Medical School in 1868. He then spent two years in study in Europe and received the designation of Master of Obstetrics from the University of Vienna in 1869. He taught in the medical college in Cleveland during seven years and during five of these years was secretary of the faculty and had important influence in the improvements in the institution in those years. He left Cleveland in 1878 to return to Boston where he had important posts in the field of life insurance for many years. Thirty-four years after leaving Cleveland he again became a teacher as Lecturer in the Harvard Graduate Medical School from 1912 to 1915.

Two faculty changes occurred in 1872. Dr. Elwell resigned his professorship of medical jurisprudence and his work was

taken by William Whiting Andrews with the title of lecturer, the first teacher in the medical college who was not a graduate in medicine. Mr. Andrews was graduated in arts at Western Reserve College in 1859. He was principal of the Cleveland High Schools for several years and later a member of the Board of Education. He studied law and became a leading member of the bar and a teacher in the Ohio State and Union Law School.

Also in 1872 Dr. Woods resigned as Lecturer on Urinary Surgery and was replaced by Dr. Benjamin Wallace Holliday, an alumnus of the class of 1869 in local practice.

Major changes came at the end of the session of 1872-73. Dr. Cassels, who had been on the faculty since 1843, and who had been the only one of the founders teaching since 1864, was compelled to resign both his professorship and deanship when he suffered a paralytic stroke in January 1873. He had been dean for twelve years. He was made a professor emeritus, a title held until his death in 1879.

The vacancy in the professorship of chemistry and toxicology was filled by election of Edward Williams Morley. He had been graduated at Williams College in 1860 and at Andover Theological Seminary in 1864. He had served in the Civil War, had taught in secondary schools, and had been a pastor of a church before he became Professor of Chemistry and Natural History in the undergraduate department of Western Reserve College in 1869. He was the second teacher and the first professor on the medical faculty who was not a graduate in medicine, a disability removed four years later by the conferring of an honorary degree of Doctor of Medicine by this faculty. He remained on the medical faculty for fifteen years, and later had an eminent career in teaching and research.

Dr. Holliday, who had been Lecturer on Urinary Surgery for one year, was appointed to the professorship of anatomy at this time, the title of Dr. Laisy being changed to Professor of Osteology.

The first appointment of a graduate of the rival medical college came when Dr. Theodore Clarke Miller succeeded Dr.

Holliday as Lecturer on Urinary Surgery. He taught for only one session but returned to the institution in the union of the faculties in 1881.

Two changes came in 1874. Dr. Lewis Buffett was appointed Lecturer on Oral Surgery and Dental Pathology and advanced to a professorship a year later. He had been graduated in 1863 from the Pennsylvania College of Dental Surgery with the degree of Doctor of Dental Surgery and then entered the medical college in Cleveland and received the degree of Doctor of Medicine in 1865. His practice was in dentistry. He taught in the medical college from 1874 to 1881.

The title of Dr. Wells was changed to omit the word "children" and Dr. Hunter Holmes Powell was appointed Lecturer on Diseases of Children and advanced to a professorship a year later. Dr. Powell's service on the medical faculty continued for more than thirty years including five years as dean. Further details of his services will be given in chapter XVIII.

Dr. Wells resigned in 1878 and the subjects of his chair were divided, obstetrics being added to the professorship of diseases of children while Dr. Henry Kirke Cushing, who had been a professor from 1861 to 1865, was appointed Professor of Gynecology.

In 1879 Dr. Holliday resigned as Professor of Anatomy and this title was restored to Dr. Laisy. Also in this year Dr. John F. Isom, an alumnus of the class of 1877, was appointed Adjutant Lecturer in Medicine to assist Dr. Bennitt. He remained one year and was succeeded by Dr. Charles Frederic Dutton, who had attended one session at the Medical Department of Western Reserve College and then had been graduated at Bellevue Hospital Medical College in 1864.

Dr. Pascal Hall Sawyer, an alumnus of the class of 1858, was appointed in 1880 as Lecturer on Diseases of the Skin. This was the second recognition of a medical speciality by a separate appointment.

This completes the long list of resignations, appointments, division of professorships, and changes of titles for these twenty years. These have not before been completely assembled. In

addition to those listed, frequent changes occurred in the occupancy of the demonstratorship of anatomy.

Two Efforts to Improve and Regularize Medical Education

The quality of institutional medical education declined with the rise of independent medical colleges beginning about 1820. Some of them devised procedures to make acquisition of a medical degree easier and more rapid. Many of them were overly generous in conferring honorary degrees of Doctor of Medicine. Also the quality of preceptorial teaching deteriorated.

The medical literature for twenty years following 1825 contained many laments concerning the low quality of American medical education, and the lack of any requirement of preliminary education in any American medical college. An opinion among the better physicians that medical education must be improved was one of the two major reasons for the founding of the American Medical Association in 1847. It had some success in improving instruction in the regular medical colleges but had no influence on the sectarian medical colleges which had begun to appear in the 'thirties.

The American Medical Association and many state medical societies appointed committees, received reports, and passed resolutions, all with little effect. Recommendations concerned mainly the improvement of preceptorial teaching and extension of the length of the session in medical colleges, in some of which the session was only twelve weeks. In many the session was fourteen weeks and only in the better institutions was it sixteen weeks. The Medical Department of Western Reserve College never had a session of less than sixteen weeks.

In the actions of medical societies a few references were made to preliminary education but no reference appeared concerning the major lack in medical colleges, which was the absence of a graded curriculum. A graded curriculum was found in all other types of education from primary school to professional schools of law and theology.

The American Medical Association recommended in 1865

that a convention of medical teachers be held. In response the deans of about twenty middle western medical colleges met at Cincinnati in 1866 and spent two days in an unsuccessful attempt to reach an agreement on a standard fee to be charged to medical students, without any discussion of the content or conduct of the curriculum.

A convention of medical teachers, rather than administrators, met in the same city in 1867 and organized the Association of Medical Teachers. This body recommended an ambitious program which included increase of the required period of medical study from the traditional three years to four years. Also it recommended that the length of session should be increased from sixteen weeks to twenty-four weeks, and that before receiving a medical degree, a student should be required to attend three sessions instead of two, as had been the regulation since the rise of the first medical college in the country. Moreover, it recommended that these three required sessions be arranged in a graded curriculum with written examinations at the end of each session.

This program would have more than doubled the number of weeks of attendance at a medical college before a student would become eligible for the medical degree. The Association held a second meeting in Washington in 1869 and then expired. The program was too radical to be adopted by any medical college. However, a few institutions inaugurated a partially graded curriculum soon afterward and several, including the Medical Department of Western Reserve College, within the next five years increased the length of session to twenty weeks.

This was the first concrete program for improvement of medical education. The importance of the work of this Association was not in what it immediately accomplished but in the fact that its published recommendations first brought to all medical educators a program that came into general use twenty-five years later.

The second attempt at standardization began in 1876; this time it was inaugurated by Eastern medical colleges instead of by those of the Middle West. The faculty of Jefferson Medical

College, after considerable correspondence, called a small group to meet in Philadelphia in the summer of 1876 during the Centennial Exposition. This group called a convention to meet in Chicago in the summer of 1877. The minutes of the medical faculty in Cleveland, in appointing a delegate, called this a meeting of the Medical Teachers Association, which shows that it was considered by some as a revival of the organization of the late 'sixties. The faculty voted: "Resolved that this faculty is strongly impressed with the necessity of elevating medical education in the United States" and instructed its delegates to present this resolution to the convention.

The convention assembled in Chicago in the summer of 1877 with delegates from about thirty medical colleges, and organized the Association of American Medical Colleges. It formulated "Articles of Confederation" to which twenty-three colleges subscribed, a number increased to twenty-eight in 1879. Each member medical college was required to publish these articles in its catalogue. These appear in the catalogues of the Medical Department of Western Reserve College published in 1878, 1879, and 1880.

The articles stated in general terms the qualifications of teachers and the subjects to be taught. The ruling upon the moot question of student fees was adroit and concerned reduction or remission of fees to individual students without mention of a standard fee. An important ruling was that no member medical college should grant more than one honorary degree of Doctor of Medicine in any calendar year. This aimed to curb an evil existent for seventy years which the American Medical Association had attacked with little success.

The length of the session was set at twenty weeks to go into effect with the session of 1879-80. No mention was made of preliminary education, nor was the graded curriculum recommended, although alternative procedures were provided for such institutions as should adopt the graded curriculum.

An endeavor was made at the meeting of 1878 to require entrance examinations of all applicants who were not graduates of colleges of arts, academies, or high schools. The Association

THE FACULTY OF 1875-1876

Standing, left to right, Doctors Powell, Morley, Darby, Himes, Halliday, Buffett. Sitting, left to right, Doctors X. C. Scott, Weed (Secretary), Bennitt (Dean), Thayer, Laisy

refused to adopt this regulation. However, in the fall of 1878 the Reserve medical faculty adopted such a ruling which went into effect in 1879.

In the meeting of 1879, and again in 1880, a minority of the member medical colleges endeavored to secure requirement of the graded curriculum without success.[8] The delegate from the Reserve medical faculty was instructed to vote for the graded curriculum, and at that time this faculty offered an optional graded curriculum.

The Association contained two groups of member institutions, a minority that wanted preliminary examinations and the graded curriculum and a majority that feared the effect on attendance, and hence on income, of such radical innovations. The question of fees and of limitation of honorary degrees also brought dissensions, and several member colleges withdrew, including the Medical Department of the University of Wooster. The result was that meetings became irregular with scant attendance and were suspended after 1882. However, in 1891 the Association was revived and has continuously been active since that year, becoming a leading force in medical education.

The preliminary phase of this association did not accomplish the objects of its better members, of which the Medical Department of Western Reserve College was one and its delegate active in the meetings. However, it did bring into open and country-wide discussion a program that much influenced the changes in medical education that came ten years later.

A Foreseeing Action

The Reserve medical faculty put into force in 1879 a definite standard of preliminary education with written examinations for entrance required of all who were not graduates of colleges of arts or "advanced members of academies or high schools." These examinations included Latin and physical science. This action excluded the applicant with little general education and permitted improvement on teaching in the medical curriculum. It also prepared the way for the next step.

The medical faculty on March 25, 1880, appointed "a com-

mittee to plan an optional three-year graded course to be published in the next catalogue." This appears in the announcement for 1880-81 published in the early summer of 1880. The contents of the curriculum were:

First Year: Chemistry, Anatomy with Dissections, Physiology and Histology, Materia Medica and Therapeutics, upon all of which subjects written examinations were to be held at the end of the first session. The students were also required to attend lectures on medicine, surgery, obstetrics, and diseases of children, without examinations.

Second Year: Chemistry and Toxicology, Anatomy and Dissections, Physiology and Histology, Materia Medica and Therapeutics, Medicine, Surgery, Obstetrics, and Diseases of Children, all with written examinations at the end of the session. The student was required to attend lectures, not followed by examinations, in gynecology, physical diagnosis, ophthalmology, otology, and laryngology.

Third Year: Students to attend lectures and take written examinations in Pathology, Physical Diagnosis, Medicine and Clinical Medicine, Surgery and Clinical Surgery, Gynecology, Ophthalmology, Otology, Laryngology, and Medical Jurisprudence.

This sequence of subjects shows some incongruities with our modern ideas, with examinations in four major clinical subjects in the second year, and no instruction in pathology until the third year. It also shows the influence of the many years that the policy of review of the repetitive curriculum prevailed, with practically all subjects taught in two years and several of them in three years. All instruction was didactic except dissections. The result of the action of offering this curriculum will appear in the next chapter. It was in advance of the majority of the medical colleges of 1880.

Union with the Medical Faculty of University of Wooster

Dr. Weber was resentful at being deposed from his professorship in 1863 and soon began organization of a rival medical college in which instruction began in the fall of 1864, under

the name of the Charity Hospital Medical College. This institution went out of existence in 1870 and was replaced by the Medical Department of the University of Wooster. The detailed history of these rival regular medical colleges is postponed to chapter XIII.

The establishment of a rival medical college created two factions in the regular medical profession of Cleveland. Many physicians, some of them partisans, lamented this division of the professions at the outset. It soon became evident that the factional differences were the cause of some loss of confidence by the laity in the entire profession, because the quarreling at times became public. It was the opinion of many, both physicians and laymen, that the only way to compose the dispute was to unite the two medical colleges around which the factions gathered.

Endeavors to this end were formulated in 1871, but soon came to an impasse. Dr. Cassels was the dean of the Reserve faculty and Dr. Weber was the dean of the Wooster faculty. Conflict between these two men had begun soon after Dr. Weber had become a professor on the Reserve faculty in 1856, and continued during the last five years of the administration of Dr. John Delamater to whom Dr. Cassels, as the secretary of the faculty, was the chief administrative assistant.

When Dr. Delamater resigned in 1861, Dr. Weber believed that he should be made dean although then only thirty-three years of age. The election of Dr. Cassels to that office brought increased resentment by Dr. Weber. Dr. Weber considered Dr. Cassels the leader in deposing him from his professorship in 1863. However, the vote of the faculty to depose Dr. Weber was unanimous. Dr. Cassels believed that dissension in the Reserve faculty in 1864-65 was abetted by Dr. Weber. As long as these two men were the deans of the two faculties no amicable agreement for union was possible.

When Dr. Cassels resigned in January 1873 because of illness, conditions became more favorable and active endeavor began at once to unite the faculties in one institution. The election of a successor to Dr. Cassels in the deanship was postponed.

The Board of Trustees of Western Reserve College, at their meeting of February 19, 1873, received "a communication from the Medical Faculty touching the Union of our Medical Department with that of Wooster University." It was voted "that the proposition of Union itself be favorably received, but that the particulars cannot be settled now." A committee of five trustees was appointed to consider the question.

This committee reported at a special meeting of the Board of Trustees held in Cleveland on May 1, 1873 when the following resolution was adopted: "Whereas it has been proposed that the Medical Departments of Western Reserve College and Wooster University should be united in one school—and whereas this union is eminently desirable for the interests of Medical science and practice, therefore, Resolved, 1st. That on condition that such union shall be affected by an act of incorporation which shall render the Cleveland Medical College independent of both of the aforesaid Institutions and on further condition that Western Reserve College and Wooster University shall each cease to maintain a Medical Department in Cleveland, this Board will enter into an agreement with the newly organized Board of Cleveland Medical College that said college may use the Building and property therewith connected in the City of Cleveland held by this Board in trust for that purpose as long as the term of this agreement is maintained—said Cleveland Medical College so to be incorporated to pay all taxes and claims against said Building and property and keep the same in good repair, and to exempt the Trustees of Western Reserve College from all pecuniary liability on account of said property held in trust as aforesaid and report its compliance with these conditions annually at their annual meeting. Resolved, 2nd. That the President and Treasurer are hereby authorized to execute such agreement whenever official notice is received that the Faculties of the Medical Departments of both Institutions have united in the new organization of Cleveland Medical College as above required and that the Trustees of Wooster University have complied with that part of the arrangements which closes their Medical Department in Cleveland."

The medical faculty minutes a week later, on May 7, 1873, state: "A communication was received from the medical faculty of Wooster University declining to entertain further any proposition looking to the union of the two medical schools." The reason given was that the trustees of the University of Wooster were unwilling to give up their medical department in Cleveland. A reply was sent showing "that the proposition came originally from the members of the faculty of the Wooster school."

Election of a dean had been postponed three months awaiting the outcome of the effort to unite the two institutions. Dr. John Bennitt, Professor of Medicine, was elected Dean after the Wooster faculty had declined further negotiations.

Plans for the union of the two medical colleges continued to be informally discussed. In 1878 the Wooster medical faculty proposed to absorb the Reserve medical faculty if it could have the medical building, which was much superior to that occupied by the Wooster institution.

By this time the undergraduate departments of Western Reserve College and of the University of Wooster were active neighboring competitors and the authorities of Western Reserve College were unwilling to take any action that would strengthen a competitor. The minutes of the medical faculty of April 1, 1878 record: "Professor Morley stated that he had learned from President Cutler that there was a strong probability that Western Reserve College would never be willing to turn over to Wooster University the property now under its control. Moved that a time be appointed for a meeting of our faculty with that of Wooster with a view of ascertaining the possibility of forming one faculty of the two." No record has been found that this proposed joint meeting was held.

The trustees, at their meeting of January 25, 1878, received a communication from Dean Bennitt "concerning the interests of the Medical Department," which was referred to a special committee of five trustees. No report of this committee is recorded.

The officers of the Ohio State Medical Society became interested in the union of the two rival medical colleges in Cleve-

land. On April 28, 1879 the medical faculty voted "to report to the next meeting of the state society that the faculty stands ready to consolidate with the Medical Department of Wooster University on an independent basis and also to make a statement of efforts already made to affect consolidation." This reverted to the plan of 1873 which had probably been reapproved by the committee of the trustees appointed ten months earlier.

The plan to move the undergraduate department of Western Reserve College from Hudson to Cleveland became public in June 1880. It was apparent that the trustees of Western Reserve College would not now give up their medical department either to be absorbed by the University of Wooster or to form an independent medical college. The only possible plan was absorption of the Medical Department of the University of Wooster by that of Western Reserve College. The members of the regular medical profession and many laymen had long urged the union of the two institutions and sparring for advantage between the two faculties now gave way to plans in which concessions must be made. The first advances were made by the Wooster medical faculty.

A meeting of the Reserve medical faculty on April 9, 1881 was attended by President Cutler, the first recorded attendance of the president at a medical faculty meeting in the thirty-eight years of existence of the medical department. "Arrangements were made for a meeting of the joint faculties of Wooster and this school looking toward a union of the two schools. Voted "to secure a man outside either faculty to preside as chairman."

The joint meeting was held July 5, 1881 with a judge of the common pleas court as chairman. It was agreed that the new faculty should consist of sixteen professors, eight from each of the two old faculties. It had been informally agreed that neither of the former deans should be eligible for election as dean of the united faculty. The sixteen professors were selected by joint ballot of all of the professors of the two old faculties. When these had been selected they elected as officers Dr. William Johnston Scott as dean and Dr. John Henry Lowman as secretary. These two men were from the Wooster faculty, which se-

cured the better offices. From the Reserve faculty Dr. Isaac Newton Himes was elected as treasurer and registrar, offices he had held for ten years, and Dr. Hunter Holmes Powell was chosen as librarian, a minor office with few duties.

The Medical Department of Western Reserve University was selected as the official name at this time although there was no incorporated university until nearly three years later. The secondary designation of Cleveland Medical College, which had been in use since 1843, was not used after this time by this institution but was adopted by a new homeopathic medical college as an official name in 1890.

The trustees of Western Reserve College at a meeting of July 26, 1881 declared vacant all the former professorships in the medical department and elected the sixteen men selected by the joint faculty meeting to the titles which had been adopted. Thus consolidation of the two rival medical faculties was secured after more than ten years of intermittent effort. An unfortunate sequel followed, which will be considered in the next chapter.

Summary

The institution experienced many and serious difficulties from 1861 to 1871. They arose primarily from the Civil War and the founding of a rival medical college in Cleveland. Decrease in enrollment, diminished income, difficulty in securing competent teachers, and limited clinical facilities were some of the details of these difficulties, which were accentuated by the rising costs occasioned by the war and the following financial depression throughout the country that began in 1873. Nevertheless, the curriculum was steadily improved with introduction of new subjects and the length of session was increased.

The second ten years brought marked improvement. The faculty became more stabilized with better teachers of more experience. The quality of instruction improved and clinical facilities were much increased. This faculty again became a leader, as it had been in the 'forties and 'fifties. It led in lengthening the session, in introducing an optional spring term, in establishing written examinations, in adopting definite entrance

requirements, and finally in offering an optional three-year graded course. It cooperated heartily with the better group in the Association of American Medical Colleges in the endeavor to improve and standardize American medical education. All these accomplishments presaged the events of the next period and gradually brought a condition that led to the union of the faculties of the rival regular medical colleges in Cleveland.

The relation to the parent undergraduate college, which had become casual in the 'sixties, improved in the 'seventies and culminated in a request by the medical faculty in March 1881 that one of its number should be elected to the Board of Trustees to bring closer relations when the undergraduate college should come to be located in Cleveland.

The nadir of the fortunes of the medical department during the century of its existence occurred in 1864-65 when dissolution seemed imminent. This was prevented by the fact that it had a record of more than twenty years of excellent achievement and had a large body of alumni. The personal contributions and sacrifices of Dr. Cassels, the dean from 1861 to 1873, were important factors in recovery. The storm was weathered and never again has the existence of the institution been seriously threatened.

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IX

NEW IDEALS IN MEDICAL EDUCATION: 1881-1893

THIS CHAPTER considers what occurred from the union of the two medical faculties until the remnant of the group that had come from the medical faculty of the University of Wooster withdrew and returned to the institution which they had left twelve years earlier. In this, the shortest of the six periods into which I have chosen to divide the narrative, occurred the transition from the traditional type of medical education to the modern type. Some of the developments had begun in the later years of the preceding period; others were entirely new.

An Unfortunate Sequel of the Union

The historical sketch written by Dr. Himes, long a member and officer of the faculty, and deposited in the cornerstone of the second building in July 1885, stated that the union of the faculties in 1881 was influenced "by a strong desire for the advancement of medical education through the suppression of rivalries and the strength of a single well endowed medical college."

The union was of two faculties rather than of two medical colleges. The trustees of neither institution took any official action until after the two faculties had reached an agreement; then, on July 26, 1881 at a special meeting, the trustees of Western Reserve College declared all of its medical professorships vacant and elected the sixteen men selected at the joint faculty meeting of July 5, 1881.[1] On September 23, 1881 the executive committee of the Board of Trustees of the University of Wooster declared vacant the chairs of its seven medical professors and one lecturer who had joined in the union.[2]

The union was not of the entire two faculties. In 1880-81 the Reserve medical faculty consisted of ten professors and two lecturers and the Wooster medical faculty included twelve pro-

fessors and four lecturers. The plan of forming a joint faculty of sixteen professors would omit at least six professors of one or the other faculty. The number was actually seven because one of the lecturers of the Wooster faculty was made a professor. The danger of this procedure should have been foreseen. Had the number in the united faculty been twenty, or even eighteen, it is probable that the sequel would have been prevented.

Two of the professors not elected were not physicians. One was a lawyer and another a dentist. This left five prominent medical practitioners who lost the prestige which at that time accrued to a professor in a medical college. Two of these five were not residents of Cleveland, possibly the reason for their not being chosen. Both of these non-residents were members of the Wooster faculty. One was Dr. Leander Firestone, an alumnus of the Medical Department of Western Reserve College, a mature man with wide reputation in practice, and an excellent teacher. Moreover, he was a trustee of the University of Wooster and resided in Wooster.

The one medical practitioner among the professors of the Reserve faculty who failed of election was Dr. Xenephon C. Scott. He was highly educated and an excellent teacher, with a wide reputation in the practice of surgical specialities. His failure of election was not due to lack of ability as a teacher or as a practitioner, but because of recent unfortunate newspaper publicity. Dr. Scott protested to the trustees, who replied that "the Board do not think it wise to go back of the action of the two medical schools as presented to this Board by a joint committee of said faculties."[3]

Dr. Scott soon joined Dr. Akin C. Miller, one of the Wooster faculty who had failed of election, in an attempt to revive the Medical Department of the University of Wooster. Dr. Miller had been appointed by the Wooster trustees to look after their property in Cleveland and had their confidence.

The president of the University of Wooster had publicly stated that the Wooster trustees "had not encouraged and much less authorized the union." The executive committee of the Wooster trustees on December 18, 1881, resolved "to approve an effort to reorganize the Medical Department of Wooster

University" and appointed the president, the treasurer, and Dr. Firestone to confer with Dr. Miller and Dr. Scott. This committee brought in a favorable report and as a result eight new professors—including Dr. Scott—were elected on February 13, 1882 to the medical faculty.[4] Instruction was resumed early in March 1882 in the months usually devoted to the optional spring term. Further description of events in this medical college is postponed to chapter XIII, which is devoted to the three successive regular medical colleges in Cleveland that were rivals of the Medical Department of Western Reserve College and University.

Thus both of the major objectives of the union were lost. A rival regular medical college still was in operation in Cleveland and again there were two factions in the regular medical profession of Cleveland, each supporting a different medical college, although the personnel of the two factions was somewhat changed. Moreover, the expectation of securing the entire clinical privileges at Charity Hospital was lost. Someone had blundered in restricting the size of the merged faculty when there were no commitments by the Wooster trustees.

Nearly thirty years later a consolidation similar to that of 1881 was contemplated. I participated in the negotiations from the outset in my capacity as an officer of the Reserve medical faculty. Familiar with the blunder of 1881 and its results, my first action was to secure a written agreement from the officers of the trustees of the institution that we proposed to absorb, that if and when the two medical faculties reached agreement, the trustees of the other institution would pledge that they would not at any time within ten years conduct medical education in Cuyahoga County, in which Cleveland is located. The consolidation was consummated and no effort has since been made to establish another medical school in Cleveland.

The Ad Eundem Degree to the Alumni of Charity Hospital and Wooster Medical Colleges

The united faculty desired the support of the graduates of Charity Hospital Medical College and of the Medical Department of the University of Wooster. The total number of grad-

uates of these two institutions who were living in 1881 was 516, in addition to fourteen men who had received the honorary degree from one or the other medical college.

The medical faculty, in February 1882, voted to request the trustees to confer the *ad eundem* degree upon all of those who requested it and who were practicing regular medicine. The trustees voted on March 18, 1882 to accede to the request. A diploma was to be issued at cost or a certificate without cost. I have never seen one of the diplomas. The certificate was printed on paper rather than on parchment and was much smaller than a diploma. It was signed by the dean and secretary of the medical faculty and carried the facsimile signature of the president.

This blanket conferring of the degree must have been considered sufficient because no later record exists of conferring degrees of this type upon individuals. Nor has any record been found of the number of certificates issued nor of who received these. The privilege was withdrawn after a few years. No way is known for determining how many of these *ad eundem* diplomas and certificates were issued. I have found several personal statements by individuals that they possessed the *ad eundem* degree. The medical directories of the 'eighties and 'nineties carry the code number of the Medical Department of Western Reserve University after the names of a considerable number of the graduates of these two rival institutions. However, it is not known whether the information given to the directories by these men was based upon possession of a document or only upon knowledge of the blanket vote by the trustees. A historical sketch printed in a report of the alumni association of the Medical Department of Ohio Wesleyan University in 1899 states that few of the Wooster alumni accepted the *ad eundem* degree.

The Origin of the Incorporation of Western Reserve University and of Its Seal

The name Medical Department of Western Reserve University was adopted at the joint faculty meeting of July 5, 1881,

because at that time the trustees had recently voted to change the name of Western Reserve College to Western Reserve University when it should be moved from Hudson to Cleveland. However, the trustees were compelled by conditions imposed by a generous donor to rescind this action, and in March 1882 the legal name of Western Reserve College was changed to Adelbert College of Western Reserve University by court order. The medical faculty declined to insert the word "Adelbert" in the name of the medical department, and therefore its name became incomplete and illegal because the medical college was a department of the undergraduate college.

The medical faculty appointed a committee in 1881 to seek endowment. The effort was unsuccessful largely because endowment of medical education was then practically unknown. The medical faculty resumed its efforts for endowment, and more especially for funds to erect a new medical building, in January 1884, by appointment of a committee "to wait upon Mr. H. B. Hurlbut and other prominent gentlemen and see what can be done towards raising an endowment and funds for a new college building."

This committee reported on February 23 that Mr. Hurlbut had subscribed $10,000 on condition that the word "Adelbert" should not be included in the name of the medical department. Mr. Hurlbut had been a trustee for twenty years and had urged the union of the medical faculties in 1881. He had opposed the adoption of the name of Adelbert College for the undergraduate department.

Gifts could be transferred only under the legal name of an institution and the word "Adelbert" was a part of the legal name of the medical department although ignored in usage by the medical faculty. At the regular meeting of the trustees on February 27, 1884, "a committee of the medical faculty made representations touching the needs of the medical department." A committee of five trustees was appointed "to confer with that department on the whole question." It was through the action of that committee that six weeks later, on April 5, 1884, eight men were incorporated as Western Reserve University. Seven

of these were already trustees of Adelbert College; the eighth was Dr. Weber, the dean of the medical faculty.

These eight men organized as trustees on April 15, 1884 as the first meeting of Western Reserve University. The trustees of Adelbert College convened on April 26. Their committee of five, appointed two months earlier, reported that "they had obtained the assent of the representatives of the late Amasa Stone to the organization of Western Reserve University and to the transfer of the property used by and devoted to the medical department of Adelbert College of Western Reserve University to the Western Reserve University. . . ." The trustees voted to convey by deed this property to Western Reserve University, which was done within a few months. Thus the name used by the medical department since July 1881 became legal after a lapse of nearly three years. The medical department was the only organization under the separate university Board of Trustees from April 1884 until January 1888.

The series of events shows that the incorporation of Western Reserve University arose from actions initiated in the medical faculty stimulated by the conditions of the subscription made by Mr. Hurlbut. This is confirmed by one who was then a trustee, who wrote: "The Medical Faculty, not being pleased with the name, were allowed to secure a university charter, and adopt the style, Medical Department of Western Reserve University. . . ."[5]

The number of trustees of the university was soon increased to twenty-four and an "executive committee on the medical department" was appointed consisting of five members, of whom Dr. Weber was one. The records of this committee for the four years that it existed shows that Dr. Weber seldom attended its meetings. Likewise his attendance at the meetings of the Board of Trustees was infrequent in the nine years that he was a member. He had little interest in any organization of which he was not the dominant directing head.

The change of organization required a new wording of the medical diploma and a new seal. As graduation of the first medical class under Western Reserve University—the class of

1885—approached, the medical faculty, on January 7, 1885 appointed a committee "to confer with the president and secretary of the Board of Trustees as to the proper design of a seal and wording of the diploma and also to arrange to procure them." Thus the origin of the university seal was initiated in the medical faculty. Its first official use was on the diplomas of the medical class which was graduated February 25, 1885.

The designer of the seal of the university used since 1885 is not recorded. The design appears to have been influenced by the great seal of the State of Ohio as it was redesigned in 1867. Both have the rising sun as a prominent feature and this suggests the motto of the university, which is the single word "lux." The seal of the State of Ohio bears no motto.

Change of Administration

Dr. Weber had been excluded from the deanship at the time of the union by the agreement that neither of the former deans should become dean of the united faculty. It had been customary for forty years for the faculty to elect its dean annually. No election is recorded in 1882. An election on March 1, 1883 changed all the officers who had served since July 1881. Dr. William J. Scott was succeeded by Dr. Weber as Dean, Dr. Lowman by Dr. Parker as Secretary, and Dr. Himes by Dr. Powell as Registrar and Treasurer. Dr. Parker was the youngest man on the medical faculty, a protégé of Dr. Weber, and subservient to him. Thus Dr. Weber came into complete control of the administration of the medical college through the two important faculty offices, as he had been at Charity Hospital Medical College and at the Medical Department of the University of Wooster during seventeen years from 1864 to 1881. His method of administration was monarchial and he would brook no disagreement with his recommendations.

Changes in the Teaching Staff

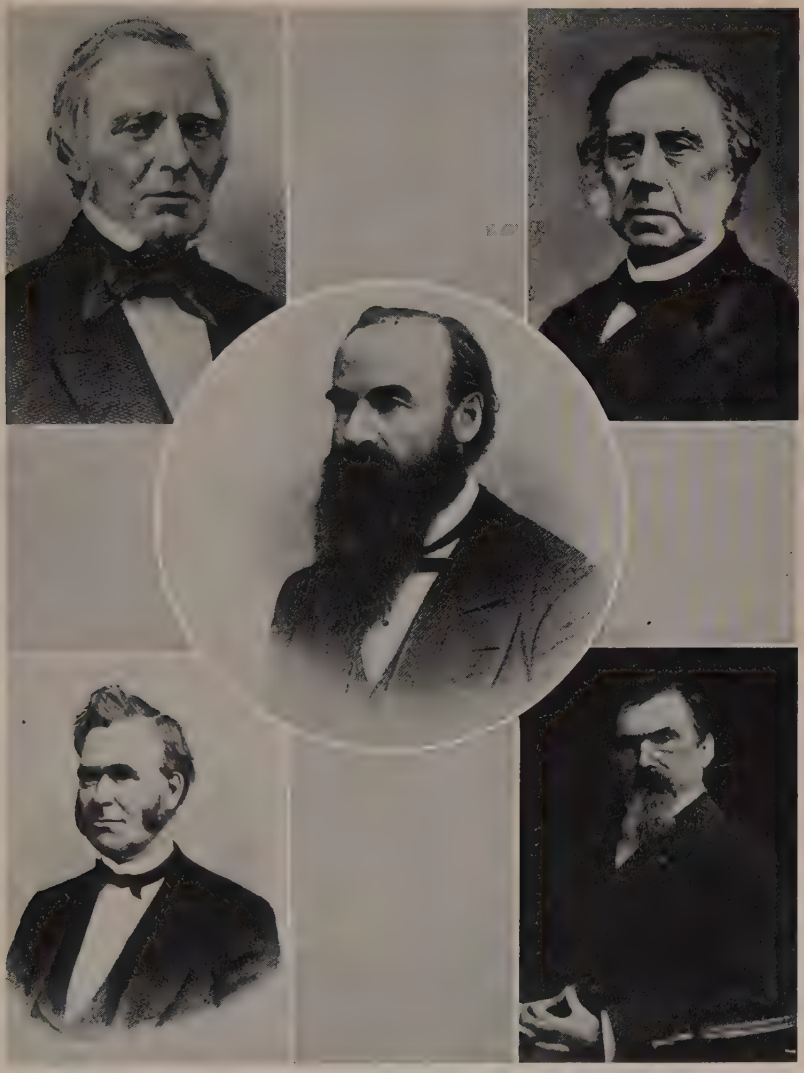
The united faculty elected by the trustees in July 1881 included eight former members of the Reserve faculty who had

been on the teaching staff for periods varying from three to twenty-eight years, and eight new professors from the Wooster faculty (Appendix B). No additions to nor subtractions from the group were made for nearly two years. The first change came in January 1883, when Dr. Theodore Clarke Miller resigned. He had come from the Wooster faculty and was Professor of Obstetrics and Diseases of Children. His resignation came in the middle of the session. Because another man on the faculty had the same title, no replacement was made. When the united faculty was formed in 1881 it had several duplicate professorships. Some duplications were erased by adoption of new terminology for titles.

Dr. Henry K. Cushing resigned the professorship of gynecology at the end of the session of 1882-83. This subject was attached to another chair. Dr. Cushing was made a professor emeritus, a title which he resigned in 1889 soon after he was appointed a member of the Board of Trustees, because he thought it improper to hold a position on the faculty, even if inactive, and be a trustree at the same time (possibly a gentle hint to Dr. Weber, who had this dual role).

The changes in the medical faculty usually were made in March or April after the announcement for the next session had been published. Therefore the lists announced in catalogues for the next year are frequently inaccurate both as to men and titles. They are often a year behind the actual membership and titles of the faculty. The correct record is from the minutes of the faculty and trustees. These sources are used in this volume in both the text and in the appendices.

Increase in the teaching staff began in 1883 with appointments of lecturers. The first was Dr. Dudley Peter Allen, appointed in 1883 as Lecturer on Minor Surgery and Orthopedic Surgery. He had been appointed Lecturer on Anatomy in 1880 with leave of absence while studying in Europe. No record has been found of his teaching anatomy or any other subject before 1883. He was a graduate of Oberlin College in 1875. After attending the session of 1875-76 at the Medical Department of Western Reserve College, he went to the Harvard Medical



THE DEANS OF THE FIRST HALF-CENTURY

JOHN DELAMATER

JOHN BENNITT

JOHN LANG CASSELLS

WILLIAM JOHNSTON SCOTT

GUSTAV CARL ERICH WEBER

School, where he was graduated in 1880. He spent two years in study in Europe before beginning practice in Cleveland. His grandfather, Dr. Peter Allen, was one of the pioneer physicians of the Western Reserve and his father, Dr. Dudley Allen, practiced in northern Ohio for more than fifty years and was a professor on the Reserve medical faculty in the session of 1865-66. Dr. Dudley Peter Allen taught minor surgery from 1883 to 1889, and in 1893, after an interruption in teaching of four years, became Professor of Surgery and was one of the leaders of the faculty during the next seventeen years.

No resignations of professors occurred between 1883 and 1888, when Professor Morley resigned the professorship of chemistry to devote more time to his professorship of the same subject in the undergraduate college and to emphasize his research which later brought him much fame.

The appointment of lecturers, which had been begun in 1883, was much increased in 1888 with appointment of five men: Dr. Guy Buttles Case in genito-urinary diseases, Dr. William Thomas Corlett in dermatology, Dr. John Pascal Sawyer in physiology, Dr. Christian Sihler in histology, and Mr. Albert William Smith in chemistry to carry the teaching vacated by the resignation of Professor Morley.

Dr. Case was a graduate of the Wooster medical college and without experience in teaching. Dr. Corlett, a graduate of the same institution, after serving a year in a demonstratorship of anatomy had gone to Europe for two years of graduate study and was a Licentiate of the Royal College of Physicians of London in 1880. He taught dermatology in the Wooster faculty from 1881 to 1886, the last two years with the title of a professor. He resigned there and began teaching in the dispensary at the Reserve institution early in 1887, without title until appointment as a lecturer a year later. His teaching service covered twenty-seven years when he retired in 1914. His interest in the institution has continued as an emeritus professor up to the present time.

Dr. Sawyer was a graduate in arts of Adelbert College in 1883 and of the Medical Department of Western Reserve University

in 1886. After service in a local hospital he was told that if he would prepare himself to teach physiology he would be given charge of that subject. He went to the University of Berlin and returned to begin teaching in the fall of 1888. He continued to teach physiology until 1893. We shall meet him many times in subsequent parts of this narrative.

Histology was in a teaching title from 1865 to 1881, and then for six years was taught as subsidiary to physiology without mention in any title. In December 1887 Dr. Christian Sihler was appointed as a demonstrator in the subject and had served during one session before being made a lecturer. He gave the first laboratory course in a microscopical subject in the latter part of the session of 1887-88 and continued to teach histology until 1894. Dr. Sihler was a graduate in medicine at the University of Michigan in 1871 and then studied at the University of Berlin for nearly a year. He was one of the earliest students to enroll in the graduate school of Johns Hopkins University, from which institution he received the degree of Doctor of Philosophy in 1881, with his research work in histology.

Mr. Smith, who was also an instructor in Case School of Applied Science and later for many years a distinguished professor of the school, served as Lecturer in Chemistry during one year. He resigned in 1889 to go to Europe for graduate study and was succeeded in the same title by Perry Lynes Hobbs, a graduate of Case School of Applied Science, with the degree of Doctor of Science from the University of Berlin in 1889.

Dudley Peter Allen also resigned in 1889. He had served for six years as Lecturer on Minor Surgery and was a favorite teacher with the students. He considered himself justified in applying for promotion. The dean, Dr. Weber, refused to permit the promotion of Dr. Allen, a younger man in the dean's own line of practice. Thereupon, Dr. Allen resigned and was not connected with the school from 1889 until 1893, when he was appointed Professor of Surgery notwithstanding protest by the dean.

The faculty, at the end of the session of 1889-90 promoted Dr. Case, Dr. Corlett, Dr. Hobbs, Dr. Sawyer, and Dr. Sihler

to the title of acting professor. It was directed that their names should appear in the catalogue as professors but that this designation in the catalogue would not change their status; that is, they would have no vote in the faculty, which was composed only of professors. This subterfuge was used because the dean was no longer sure of his control and feared to give votes in the faculty to some of these younger men with excellent training and advanced ideas of medical education.

Dr. Thayer, who had been a professor since 1856, and who had taught surgery since 1862 and medical jurisprudence since 1873, resigned his professorship of surgery in 1890 but remained as Professor of Medical Jurisprudence. Dr. Parker was made Professor of Surgery. The action by Dr. Thayer was on account of ill health and presaged his death early in the session of 1890-91. His successor as teacher of medical jurisprudence was Judge Conway Whittier Noble, a leader in the Cleveland bar who had previously taught the subject as a member of the Wooster medical faculty.

Dr. Henry J. Herrick and Dr. William J. Scott resigned their professorships at the end of the session of 1891-92. Both were of the group from the Wooster faculty that joined the union of 1881. Dr. Bennitt, who had been teaching in the medical college since 1866, died in May 1892.

At the beginning of the session of 1892-93 Dr. Henry Swift Upson was appointed Extraordinary Professor of Nervous Diseases and Dr. Frederick David Brandenburg to the same title in gynecology. This was a revised device to give high titles in the catalogue while denying a vote in the faculty.

Dr. Upson was a graduate in arts of Western Reserve College in 1880, and in medicine at the College of Physicians and Surgeons of New York City in 1884. He had returned to practice in Cleveland after a year in a hospital in New York City and a year of medical study in Europe. This was the first separate appointment in nervous diseases in the history of the medical college. Dr. Upson was soon promoted to an unrestricted professorship and continued in it until 1912.

Dr. Brandenburg was a graduate in arts at Lafayette College

in 1884 and in medicine at Bellevue Hospital Medical College in 1885. He was not promoted because he contemplated early removal from Cleveland. He remained in Cleveland only three years.

A new subordinate title of "assistant" was adopted in 1888 when the required graded course began. Some of these were assistants in laboratory subjects. The teaching staff of 1881-82 included sixteen professors and a demonstrator of anatomy. Fifteen men were added to the teaching staff in the next twelve years with titles above that of demonstrator or assistant. Seven were replacements of men who had resigned; the others were new positions. The total number of men—not including those who did only dispensary teaching—did not greatly increase except in 1888-89 when the total number rose for a single year to twenty-four, which included several minor titles. The number in 1881-82 was seventeen and in 1892-93 it was nineteen. Nine of those who were members of the faculty in 1881-82 were still members in 1892-93. Five of these had been members of the earlier Reserve faculty and four of the Wooster faculty. More than half of the faculty of 1892-93 were comparatively young men, an important fact in connection with the events that were soon to come.

The historians of medical colleges tend to claim that every teacher in the particular institution under consideration was an excellent teacher and for many of these the claim is made that they were not excelled in any institution in the country. Anyone connected with education of whatever grade knows that educational institutions often get mediocre teachers on their staff. To claim uniform excellence is to contradict universal experience.

I make no such claim for the entire group who were teachers in the first half-century of the Medical Department of Western Reserve College and University. I knew comparatively few of them personally. However, I have heard many oral statements from those who were students in the institution, some as early as 1846. Comments on the quality of teaching are found in manuscript and published recollections of former students and

colleagues. Although one is likely to cast halos about the heads of his former teachers, the opinions of students have value.

I have assembled evidence from various sources and from the composite of this evidence I am convinced that in fifty years the institution had many teachers of high excellence and a few who were markedly inefficient. Happily most of the latter group were soon advised to resign; a few were dismissed. The majority of the more than sixty different teachers in these fifty years were of the group that can be classed as "satisfactory," which means they were neither outstanding in excellence nor in crass mediocrity. The faculty as a body controlled the membership of the teaching staff, and in several instances did not hesitate to rid itself of inefficient teachers even if they held high standing as practitioners. This was done gently if possible and firmly if necessary. In sifting all the evidence I conclude that throughout the first half-century the faculty was constantly much better than that in the average medical college, except for three or four years in the 'sixties.

Development of the Curriculum

Four prominent features are included in the progress of the institution from 1881 to 1893: the acquisition of a new building, the beginning of endowment, a revolution in the curriculum, and establishment of a dental department. The new building is described in chapter X. The dental department will be mentioned in a later section of this chapter.

Three endowments were received before 1893. Mr. John A. Vincent gave $3,000 in 1884 as a fund for pathology, the first endowment received by the medical college. The estate of Hinman B. Hurlbut paid $10,000 in 1889 as a fund in support of the dispensary. Mr. John Lund Woods gave $125,000 on December 21, 1892. His letter of gift stipulated that $100,000 should be a fund to support the subjects of histology, chemistry, anatomy, physiology, and pathology—named in this order. The balance was to be used as a fund to care for the building which Mr. Woods had given in 1887. The value of this fund increased until it was reported as $149,000 in June 1893.

The assumption has been maintained that Mr. Woods made this gift to support full-time professors and research. The wording of the letter of gift does not bear out this assumption. The apparent income would provide only $1,200 in each of the five subjects he names. Mr. Woods was a trustee and knew that the salaries of professors in science in the college of arts at this time was over $2,500. It seems probable that he expected to provide payment for local practitioners of medicine to give approximately half time in teaching these five subjects, with some attention to research.

The length of session was the same throughout these twelve years, with twenty-four weeks in the required session from September to March followed by an optional spring session of twelve weeks. In the last year of this period a decision was made to incorporate the optional term into the required term, with an increase in the length of session to thirty-two weeks. This extension became operative beginning with the session of 1894-95.

The weekly schedule of the required session from 1881 to 1888 contained from twenty-five to twenty-nine didactic lectures, ten hours of clinics, and nine hours of dissection given in the evening. The average of forty-five scheduled hours per week gave 1,080 hours of instruction in the session, the same that prevailed in the late 'seventies. The fundamental subjects of anatomy, chemistry, hygiene, pathology, and physiology received half of the didactic hours. No laboratory work, except dissection, was required until 1888. An optional course in qualitative analysis was offered, and microscopical demonstrations were given in connection with the instruction in normal and pathological histology. A few new subjects appeared in 1881, including hygiene and two further divisions of surgery, minor surgery and orthopedic surgery. However, the amount of instruction and the methods of teaching changed little from 1878 to 1888 in the repetitive course.

The repetitive curriculum had prevailed since the first organization of institutional medical instruction in the American colonies in 1765. All of the students in a medical college attended

all the instruction and on return for a second session again attended all the teaching. If a student returned for a third session the procedure was again repeated. This method was recognized as unsatisfactory, and individual suggestions for some change appeared in articles discussing medical education in the latter part of the first half of the nineteenth century. The first definite plan presented was the program for a graded course of three years proposed by the Medical Teachers Association in 1867, which has been described in the preceding chapter. This suggested plan received little attention, and when the Association of American Medical Colleges was organized in 1877 it did not recommend such a program.

An optional graded course had been announced in a few eastern medical colleges in the 'seventies and, as already stated, such a course covering three sessions was first announced in the catalogue of the Medical Department of Western Reserve College published in the spring of 1880. This course was published in each succeeding catalogue. Those students who elected to take it were promised a certificate testifying the fact, in addition to the regular diploma, when they should reach graduation.

The catalogue printed in the spring of 1887 states regarding the graded course: "The number of students availing themselves of the course has steadily increased until, at present, one half of the class are graded students. The faculty are thoroughly convinced from the practical results thus far obtained that they are subserving the very best interests of the students, the profession, and the public in thus lengthening the time spent by the student in college, and in urging those intending to pursue a course in medicine to enter at once upon the studies in the graded course." This advice against beginning medical study under a preceptor showed diminished confidence in preceptorial teaching as a part of medical education.

The faculty minutes carry no discussion of the graded course from 1880 until December 1885, when a motion made to require a graded course of three years was laid on the table. At that time one third of the students were taking the optional graded course.

In November 1887 a motion was introduced in the faculty to require the graded course of three years beginning with the session of 1888-89. The question was discussed at two subsequent faculty meetings and the motion was adopted on January 18, 1888. This marks the beginning of the modern type of medical education in this institution. The graded course did not become operative in the rival local regular medical college until 1890-91.

The three classes of the graded course were designated junior, middle, and senior. The schedule for 1888-89, the first year of operation was as follows:

First Year: Chemistry, 72 hours; Anatomy lectures and recitations, 120; Physiology lectures and recitations, 120; Chemical or histological laboratory, 96; Histology or dissection, 48; Dissection, 24; Materia medica, 48; Medical clinic, 48; Surgical clinic 48; total 624 hours required with 144 free hours not including evening hours when much of the dissection was done. The laboratory work had to be done in sections because of insufficient equipment for the entire class.

Second Year: Anatomy, 96; Physiology, 48; Histology or physiology laboratory, 96; Pathology, 24; Therapeutics, 72; Medicine 72; Surgery 96; Obstetrics, 48; Obstetrics and pediatrics, 24; Medical clinic, 96; Surgical clinic, 96; total 768 hours plus 48 free hours in the schedule.

Third Year: Physiology, 24; Pathology, 48; Therapeutics, 24; Medicine, 72; Surgery, 96; Obstetrics, 48; Obstetrics and pediatrics, 24; Dermatology, 24; Gynecology, 24; Minor surgery, 24; Ophthalmology, 24; Ophthalmology and otology, 24; Ethics and hygiene, 24; Medical clinic 48; Surgical clinic, 96; Dispensary, 96; total 720 hours.

It should be noted that physiology and medical and surgical clinics are included in the instruction of each of the three years. This curriculum provided laboratory work in anatomy, chemistry, histology, and physiology. The total curriculum of 2,112 hours included 816 hours in the fundamental subjects, nearly thirty-nine per cent of the total.

In the remaining five years of the third period some changes were made. Nervous diseases became a separate subject. Dispensary work, at first restricted to the senior year, was scheduled in both the middle and senior years, beginning in 1892. In 1892-93 clinics were scheduled in medicine, surgery, eye and ear, gynecology, dermatology, nervous diseases, and pediatrics.

Increase of Clinical Facilities

The clinical facilities in the 'seventies consisted of the amphitheater clinics at the college building on two days a week, a dispensary service for walking patients, the teaching privileges at Cleveland City Hospital, which included clinics after the amphitheater was built in 1880, and part of the clinical privileges at Charity Hospital after 1878.

One of the purposes of the union of the faculties in 1881 was to secure all of the clinical privileges at both Cleveland City Hospital and Charity Hospital. The catalogue published in the summer of 1881, after the union of the faculties had been effected, states: "Furthermore the entire control of clinical material of two well appointed hospitals will be within the faculty; so that clinics will be given every day. The personal contact of patients and students can now be made more effective." At this time Cleveland City Hospital had about seventy beds and Charity Hospital about one hundred beds. This plan failed because of the reorganization of the Wooster medical faculty which continued to have one half of the clinical privileges at Charity Hospital for two years; in 1884 an agreement was secured giving complete control of the clinical material at Charity Hospital and its associated St. Ann's Maternity Home. The Reserve faculty from this time nominated the entire staff of Charity Hospital. This excluded the Wooster faculty, which established a small hospital in a residence on Huntington Street.

The first occupation of the new medical building was the opening of the dispensary on January 17, 1887. Facilities for dispensary teaching were much improved with separate small rooms for the several services and an adjacent amphitheater for class teaching. The dispensary was called a polyclinic and was organized under eight departments, namely: medical, throat and chest, surgical, eye and ear, diseases of women, diseases of children, skin, and obstetrics. Four of these held clinics six days a week, two of them three days a week, one of them two days a week, and one other on only one day each week. Students were assigned to one month of service in each department, seniors having preference.

The subscription of $10,000 made by Mr. Hurlbut before his death in 1884 was paid by his estate in 1889 and the income was assigned to support of the dispensary. Also Mr. John Huntington gave a fund, not controlled by the university trustees, to support dispensary service, and in the catalogue printed in the spring of 1890 the designations "The Hurlbut Dispensary for Women and Children" and "The Huntington Medical and Surgical Dispensary" first appear.

The clinical amphitheater lectures were held at the hospitals, four days at Cleveland City Hospital and three days at Charity Hospital. Students attended obstetrical cases at St. Ann's Maternity Home.

In 1889 the city of Cleveland began the expansion of its infirmary by building the first unit of a City Hospital. Because this new name would cause confusion of names, the Cleveland City Hospital, which had occupied the building of the Marine Hospital since 1875, changed its name to Lakeside Hospital. The Reserve faculty divided the clinical facilities, at first meager, with the other local medical faculties, when the new municipal City Hospital opened.

A few recent medical graduates had spent a year or more in hospitals. This practice began in eastern cities before the middle of the nineteenth century. It was first introduced in Cleveland when the Marine Hospital was opened in 1852. These young physicians were selected by the management of the hospitals, usually through personal influence. The first notice of participation of the medical faculty in selection of these candidates appears in the catalogue printed in the spring of 1887, which states: "The position of house physician and assistant house physician to these hospitals are filled by appointment from the senior class." In 1891 the word "externe" is added to these positions with the statement that the service is for a year and a half, the last twelve months with residence in the hospital.

Inauguration of Laboratory Instruction

The traditional medical education included dissection secured as best the student could, often under his preceptor. As

stated in an earlier chapter, the Medical Department of Western Reserve College from its first year required an examination in practical anatomy before granting the degree of Doctor of Medicine. When dissection was done at the medical college it was under the demonstrator of anatomy, who was a recent graduate with little experience in teaching.

The faculty assumed more intimate control of instruction in the dissecting room when the graded curriculum was adopted in 1888 by appointment of Dr. Jacob Laisy, who had been teaching anatomy since 1863, as Professor of Practical Anatomy. The catalogue states: "The dissections are made under the immediate direction of the Professor of Practical Anatomy . . . assisted by the demonstrator of anatomy." The new building had a refrigerator which permitted accumulation of material throughout the year and preservation, giving an increased supply of material for use during the session. The improvement in teaching of practical anatomy in 1888 was nearly as striking as the inauguration of new laboratory courses.

The optional laboratory course in qualitative analysis was not offered during the three years from 1884 to 1887 when all instruction was given at the hospitals because of the erection of the new building.

Professor Morley was the leader in planning the new building and his influence is seen in the assigning of an entire floor to chemistry. The space and furniture were available in the session of 1887-88, but little equipment was available and instruction in the laboratory was restricted to the optional course. Even when the required course became operative in 1888-89, the laboratory work was given to sections of the class because of limited equipment. The subject matter included mainly inorganic chemistry, with some qualitative analysis and a little of what was then called physiological chemistry. This included qualitative urinary analysis.

Microscopical demonstrations began in histology in 1874, when the catalogue stated: "It will be the endeavor to illustrate the lectures by practical demonstrations to show the application of physiological science and histology to practical medicine and

surgery." The demonstrations consisted in passing around the class mounted slides with a hand microscope. An atlas of histology was among the recommended textbooks after 1881.

The new building was first completely occupied at the beginning of the session of 1887-88. In it was a large room designated as a physiological laboratory. Histology was then taught under the professorship of physiology. A minute of September 12, 1887 authorizing reimbursement of the men teaching physiology, histology, and pathology" for starting the laboratories" indicates that laboratory instruction was given early in the session of 1887-88 in some of these subjects to students in the optional graded course. Reimbursement in December 1887 to one of the professors to the amount of $234 paid by him for eight microscopes in October 1887 is the first record of ownership of microscopical equipment for use of students in the history of this medical college. Dr. Christian Sihler was appointed in December 1887 "to take charge of the laboratory course as demonstrator of histology," which began in January 1888 on two afternoons of each week. This is the first appointment of a definite laboratory teacher except the demonstrator of anatomy.

The catalogue published in the spring of 1888 states: "The physiological laboratory . . . by aid of a donation of Mr. John Huntington . . . has been furnished with microscopes and other apparatus necessary for practical work: . . . Each student will be furnished with an instrument and necessary fluids and chemicals, and the class will be divided into sections. . . ." This equipment was entirely for histology rather than for what we now consider physiology. Mr. Huntington gave $500 for this purpose in December 1887.

Gross pathology had been taught since the founding of the medical college. The first mention of pathological histology came with the inclusion of this phrase in the title of a teacher in 1872. Microscopical demonstrations are mentioned before 1876. An assistant in pathology was authorized in September 1887 and appointed in January 1888. The same microscopes were used by histology and pathology, but nothing more than demonstrations were given in pathological histology until 1894.

The first endowment received by the medical college was $3,000 given and received in January 1888 by the father-in-law of Dr. Himes, Professor of Pathology. The faculty directed that its income should be devoted to pathology and that it should be called the John A. Vincent Fund in honor of its donor. The subscription of $10,000 made by Mr. Hurlbut was not paid by his estate until 1889. Therefore the John A. Vincent Fund was the first endowment received but not the first subscribed. Some equipment for demonstrations in pathological histology was purchased from the income of this fund.

Physiology was associated with histology after 1865. This association was so close that it is difficult to determine whether the demonstrations given by the professor of this subject referred to both subjects or only to histology. The catalogue printed in the spring of 1887 mentions "experiments" in these subjects. These were a few demonstrations of the effect of drugs upon anesthetized animals; they were pharmacological rather than what we now consider physiological. It is unlikely that such demonstrations were given during the three years that the teaching was outside the medical building in the hospitals. Mention in the plans of the new building of a laboratory of experimental therapeutics was mostly wishful thinking. No laboratory course in pharmacology was offered until 1894.

The inauguration of a definite laboratory course in physiology was more extensively planned. Although several Cleveland men had gone to Europe for study, Dr. John P. Sawyer was the first to go to prepare for teaching a laboratory subject. He began, in September 1888, a required laboratory course in physiology with the title of Lecturer on Physiology and Director of the Physiological Laboratory. The laboratory consisted of a room in which the only equipment was tables and chairs. An appropriation of $100 for physiological apparatus was made at the request of Dr. Sawyer. The entire amount was spent for building a kymograph, after plans by Dr. Sawyer. It was built by Warner and Swasey of Cleveland and is believed to be the first kymograph manufactured in the United States. The remainder of essential equipment Dr. Sawyer provided from his private purse.

This was one of the very early, if not the earliest laboratory course in physiology required of all students. I have found none earlier in searching the catalogues of other medical colleges. The next issue of the catalogue states that the course included experiments by students on digestion, nerve-muscle physiology, respiration, and circulation. Dr. Sawyer taught physiology for five years and then was transferred to a clinical professorship of medicine.

The session of 1888-89 began with required laboratory courses in anatomy, chemistry, histology, and physiology. Few other medical colleges in the country were then using the laboratory method of teaching in as many as four subjects.

The desire to begin a laboratory course in bacteriology is shown by an invitation in 1891 to Dr. Francis Hobart Herrick, Professor of Biology in Adelbert College, to give a course in bacteriology with laboratory exercises. However, equipment was not available and Dr. Herrick gave a lecture course with demonstrations.

The catalogue printed in the spring of 1893 shows appointment of an assistant in bacteriology, and announces "a well-equipped and stocked bacteriology laboratory . . . with opportunity for students . . . to work in bacteriology . . . under competent instruction." This was apparently an optional course because the subject did not appear in the curriculum until 1894-95.

The inauguration of the graded curriculum with laboratory courses in four subjects in the fall of 1888 was the beginning of the modern type of medical education in the Medical Department of Western Reserve University at a time when no other medical college away from the seaboard states had yet begun the modern methods extensively. The year 1888 marks the most extensive revolution in teaching in the first century of this institution.

Standards

The entrance requirement in 1881 was "evidence of a fair English education as shown by written examinations given by the medical faculty." Graduates and matriculates of colleges of

arts and sciences and graduates or advanced members in academies and high schools were exempted from this examination.

In 1882 the phrase "fair English education" was replaced by "good ordinary English education." The entrance requirements in 1885 became "A diploma of a good literary and scientific college, or a high school, or a teacher's certificate. Or lacking this an examination in the branches of a good English education before a committee of the faculty."

The Association of American Medical Colleges, dormant during the 'eighties, began to revive in 1891 and recommended certain specific features of entrance examinations which were first put into effect at the Medical Department of Western Reserve University for the class entering in the fall of 1893. The specifications were: "An English composition of not less than 200 words; an examination in higher arithmetic and elementary physics; and translation of easy Latin prose, provided that the students be allowed one year to make up any deficiency in this part of the examination."

The faculty also advanced the quality of work required of students in the courses. Written examinations had been begun in the late 'seventies, when a passing grade of fifty per cent was required. The faculty voted in February 1883 that "the minimum standard of sixty per cent be demanded." At the next faculty meeting, after the final examinations had been held, the standard was advanced to sixty-five per cent and used for decisions on recommendations for the degree for the class of 1883. In March 1887 the passing grade was advanced to seventy per cent.

The increased entrance requirements, the increased standard for passing courses, the graded curriculum, and the introduction of laboratory instruction improved the preparation of the graduates in 1893 for a medical career much over the preparation of the graduates of 1881.

The Dental Department

A dental department was organized in one of the local homeopathic medical colleges in 1891, the first in Ohio north

of Cincinnati. This was possibly a stimulus for the action of the medical faculty in January 1892 when it authorized the organization of a dental department within the medical department. A dental faculty was organized with a separate dean. Local practicing dentists were appointed to teach the dental subjects, while part of the instruction was given by members of the medical teaching staff in common classes of dental and medical students.

The unfinished fourth floor of the medical building was adapted to the teaching of the dental subjects and instruction of dental students began in September 1892. The first graduates were in 1894. It was provided that dental students, by taking certain additional medical subjects in their final year in the dental course, could, in one additional year, secure the medical degree. A few men did this. The dental department remained in the medical building until it was moved to rented quarters in 1896.

I have recently published in another volume a complete history of the School of Dentistry of Western Reserve University.[6] Therefore in this volume I shall make only such incidental references as concern the varied changes in the relation of these two professional schools, which have existed side by side in the university during a half a century.

The Withdrawal of 1893

The series of events that came to a culmination in the summer of 1893 have never been assembled in one narrative. Therefore a somewhat extended account is given of the episode that marks the end of the first half-century of the Medical Department of Western Reserve University when a minority group of the faculty resigned simultaneously and without warning and joined the Wooster faculty. This was not spontaneous in origin; it had been in the making since the union of the faculties twelve years earlier.

Fundamentally the events resulted from two opposed attitudes toward educational progress. An older group of the faculty believed that the traditional type of medical education, in-

cluding the conduct of medical colleges as private enterprises, needed no change. A different opinion was held by a younger group of the faculty, most of them graduates of colleges of arts as well as of medical colleges. Several of these had recently studied in Europe and were keenly conscious of the changes that were developing in medicine and medical education. However, the division was not entirely on the basis of age, because a few of the older men supported the younger group.

One who was involved in the conflict wrote, twelve years after its close: "The faculty was composed in part of men past middle life, who, for many years had exercised control and opened and shut the door to its sacred domain at will. There were some younger men in the faculty in close touch with the new spirit. . . . The new was championed by Dr. I. N. Himes, one of the best educated, scientific, and constructively progressive of the younger men and temperately advocated by Dr. H. K. Cushing, who, though belonging to the class of the older men, was heartily with the younger in spirit."[7] Dr. Himes was not one of the younger men in years, being at this time past fifty years of age.

Two strong personalities were involved in this conflict; one that of the dean of the medical faculty, petulant, and dictatorial; the other, that of a president of the university, endeavoring to bring cooperation among the several departments and fervent in the belief that the university as a whole was more important than any one of its constituent parts.

When the two faculties united in 1881 it was hoped that factional differences would be laid aside and that all would work together to build up a strong institution. The hope was not realized. Through twelve years the line of cleavage persisted between those who had been members of the earlier Reserve faculty and those who had been on the Wooster faculty.

The group of the former Reserve faculty was led by Dr. Bennitt, recently the dean, with the assistance of Dr. Thayer and Dr. Himes. When Dr. Thayer died in 1890 and Dr. Bennitt in 1892, Dr. Himes became the leader with the assistance

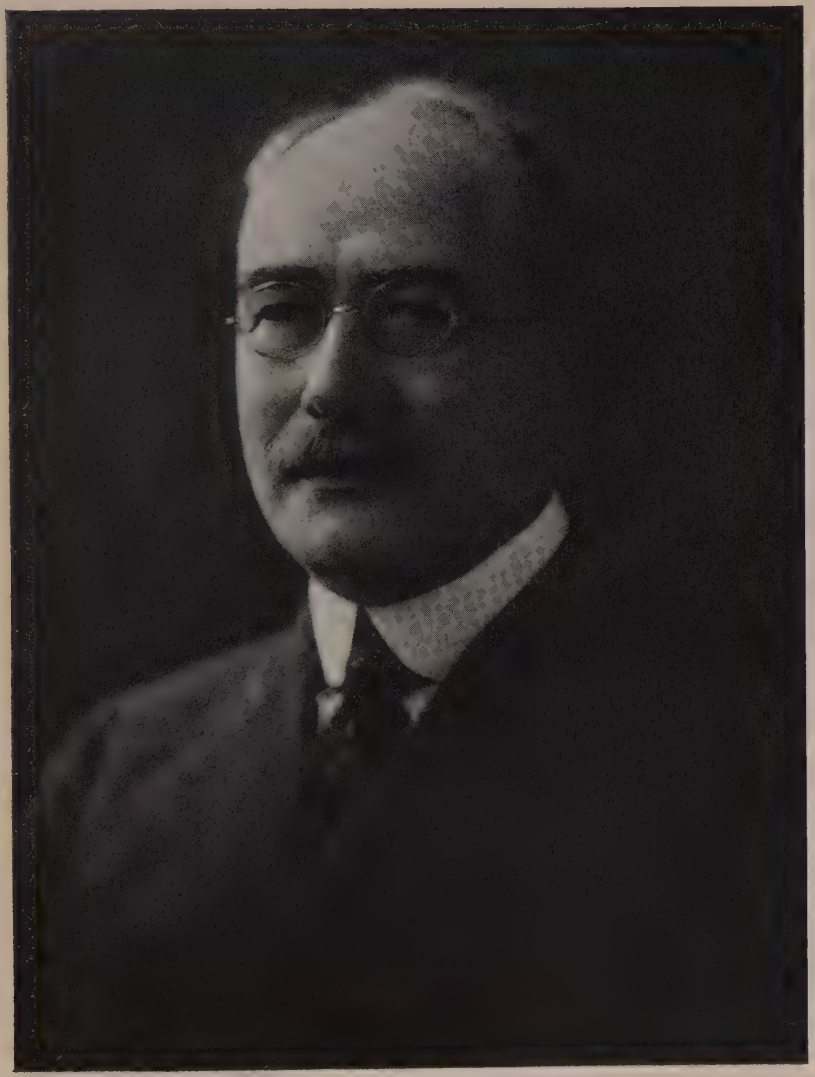
of Dr. Sawyer. Dr. Weber was the leader of the group that came from the Wooster faculty, of which Dr. Kitchen was the astute political planner.

Dr. Weber soon came into conflict with one of his own group. In a matter of private practice came a passage of words between Dr. Weber and Dr. Henry J. Herrick in which Dr. Weber claimed that he had been insulted. He demanded that Dr. Herrick resign from the faculty although the incident was not connected with the medical college. Resignation was refused and Dr. Weber asked the trustees to dismiss Dr. Herrick, which they declined to do. Then Dr. Weber resigned.

This was in 1885 when the erection of a new building was about to begin. Any dissension in the medical faculty that should become public might have resulted in the withdrawal of his gift by the donor of the building. Therefore a committee of the faculty composed entirely of members of the Reserve group prepared a resolution apologizing for the utterances of their colleague and lauding Dr. Weber, who then withdrew his resignation.

Dr. Weber's disagreements were not only with individual members of the faculty; it extended to the trustees and the president. The organization of the university as a separate corporation has already been described. One object was to avoid the word "Adelbert" in the official name. Another almost as potent, was divorce from any other educational institution with the expectation that, with the medical department as the only member of the university, it could continue its traditions and practices.

In the original articles of establishment of 1844, the specification was made that all appointments to professorships and lectureships should be by the trustees on nomination by the medical faculty. This procedure was followed for twenty years until in the exigencies of the Civil War the method was neglected in emergencies and came to fall more and more into disuse, and appointments to professorships and other teaching positions were made by the medical faculty and published in the catalogue without confirmation by the trustees. This neglect



John Pascal Sawyer. Professor, 1892-1932; Vice-Dean, 1893 to 1895

increased during twenty-five years under the administrations of President Hitchcock and President Cutler.

President Cutler resigned in 1886 and it was apparent that a new president might be less lenient with the medical faculty. The faculty appointed a committee in February 1886 "to examine into our legal relations to the Board of Trustees." Rev. Hiram Collins Haydn was elected president in November 1887. In the next few months he organized the College for Women and made affiliations with the Cleveland School of Art and the Cleveland Conservatory of Music. This made four departments in the university instead of one.

Dr. Henry Kirke Cushing, who had twice been a member of the medical faculty and was an emeritus professor, was elected to the Board of Trustees in January 1888 and put on the executive committee of five which replaced the former executive committee for the medical department. The record shows that Dr. Cushing attended every meeting of this committee and of the trustees. He became a zealous advocate of the medical department and initiated many of the actions of the trustees which gradually changed the medical department from an organization dominated by one man to a real university department, responsible to the president and trustees rather than to the dean alone.

During forty-five years from 1843 to 1888 the president had taken no intimate part in the conduct of the medical department and only once had a president attended a meeting of the medical faculty. President Haydn presided at the faculty meetings of other departments of the university and believed it his duty to preside at the meetings of the medical faculty. He appeared at a medical faculty meeting in January 1889, although not invited, and was told that he had no business there. A second attempt brought the same result, and on February 22, 1889, the medical faculty voted "to acquaint Dr. Haydn with the fact that it has not been customary nor necessary for the president to be present at the meetings of the medical faculty pertaining to the management of the medical department."

Dr. Haydn then wrote to President Eliot of Harvard Uni-

versity and to Provost Pepper of the University of Pennsylvania asking their personal relations to their medical faculties. Both replied that they presided at medical faculty meetings and advised Mr. Haydn to bring about the same condition at Western Reserve University. Then Dr. Haydn insisted that the trustees should define his relation to the medical faculty. A committee of three eminent lawyers of the trustees was appointed and brought in a report in June 1889 that "It is the legal right of the president to be present and preside at every meeting of the faculties . . . to call a meeting of any faculty, and . . . if any special meeting is called by the dean or any other officer thereof it is the president's right to have reasonable notice of such meeting so that he may attend and preside if he sees fit to do so." This ruling was sent to the officers of the medical faculty "but to this the dean and the secretary of the faculty gave no heed." This ruling meant the end of a dictatorship by any dean.

The trustees of the university wished to bring cooperation between its various parts and formed a university senate consisting of officers and two members of each faculty of the several departments. The medical faculty refused to cooperate.

The by-laws of the university adopted in 1884 had reaffirmed the procedure of the articles of establishment of 1844 under which the medical faculty should submit nominations for teaching positions rather than make appointments. The officers of the medical faculty did not comply.

Dr. Haydn sent a special report to the trustees in the spring of 1890. In it he said in regard to the by-laws of the university and the regulations of the university senate: "Resistance to this order of things has been met in the medical department only. The function of the president and the Board of Trustees, according to their notion of it, is simply to say Amen to their recommendations and issue diplomas at their suggestion. We may not inquire into the details of their work. The president may not attend the faculty meetings nor look into their records. We are called upon to figure simply at Commencement occasions and to give the dignity of the university to what aims

to be a private concern, and so far forth we mislead the public."[8]

The actions, and lack of action, of the medical faculty and its officers reflected the wishes of Dr. Weber. During seventeen years as dean of Charity Hospital Medical College and the Medical Department of the University of Wooster, and after he became the dean of the medical faculty of Western Reserve University in 1883, he had ruled as a dictator. Accustomed for many years to absolute rule, he opposed entrance of any superior officer to preside at faculty meetings and temper his control of members of the faculty.

The faculty minutes record the attendance of Dr. Haydn at only one faculty meeting and then he did not preside. However, these minutes are known to be incomplete. It became customary for the secretary to take his notes of faculty meetings to Dr. Weber who edited them to omit any actions that did not please the dean, before the minutes were written into the official record.

Dr. Charles Franklin Thwing succeeded Dr. Haydn as president in November 1890 and was inaugurated into this office in February 1891. Dr. Haydn had won in the contest with Dr. Weber and had prepared the way for the new president, who, two weeks after his inauguration, attended and presided at a medical faculty meeting and continued to do so at subsequent meetings. Dr. Weber did not attend faculty meetings from that time. He was present at only one of sixteen meetings between April 1891 and May 1893.

Three months after President Thwing presided for the first time at a medical faculty meeting, Dr. Weber resigned as dean, a technique he had practiced for years when matters did not go to please him. After some mollifying, as in 1885, he withdrew his resignation but did not resume attendance at faculty meetings. The endeavor to appease him was made because it was believed that he had a large personal influence with a layman of wealth who was expected soon to give a large endowment to the medical department.

The group of eight who had come from the Wooster faculty

in 1881 had been reduced to five professors at the end of the session of 1891-92 by deaths and resignations. Only one of the new men who had joined the faculty was subservient to Dr. Weber. The several young men who had come to the teaching staff were not accustomed to servility and would not follow the dean in all matters. As a result they were not advanced to positions where they would have a vote in the faculty.

Notwithstanding the policy that no one reached full faculty standing except through subservience to the dean, the Wooster group had come to be a minority. The dean of the rival Wooster medical faculty, in a letter to his president in August 1893, said: "The faction originally the Cleveland Medical College have gained a decided advantage and are determined to push their victory to the extent of 'wiping out' the identity of the other side. This endeavor will continue until 'the whale will throw up Jonah' if Jonah insists on remaining."[9]

The final act of the drama began in January 1893. Mr. John L. Woods conveyed to the university treasurer $125,000 for endowment of the medical department on December 21, 1892. During fifty years the medical faculty had handled its own funds through a faculty treasurer. The annual income of $7,500 from this endowment could not be turned over by the trustees to the faculty treasurer to be disbursed by the traditional "division of the spoils" at the end of each session, as Dr. Weber had requested. The executive committee of the trustees, in January 1893, passed a resolution "requesting the medical faculty to accept the university treasurer as the treasurer of the medical college faculty." This was polite notice that the faculty treasurer would no longer be permitted to disburse the funds on the orders of the dean.

The medical faculty when it received this request in February 1893, voted that "The request is considered impracticable as the duties of this office are so peculiar in registering students," a lame excuse because the offices of registrar and treasurer, although at this time combined, had been held by separate individuals and could be easily again separated. However, the last time that the faculty treasurer functioned was at the divi-

sion of the proceeds of the session of 1892-93. No income from the endowment was included in this division. The record shows that Dr. Weber received a larger amount than any other teacher. This was notwithstanding the fact that he had done no teaching in the session of 1892-93.[10]

Dr. Weber had become a subordinate when the trustees decided that the president should preside at medical faculty meetings. The trustees had gradually come into control of the medical department and members of the teaching staff could appeal to the president or to the executive committee of the trustees. Dr. Henry K. Cushing, intimately familiar with all details of the medical department, and in sympathy with the progressive group in the medical faculty, had much influence as a member of this committee.

The medical faculty decided, in February 1893, to increase the length of the required session to thirty-two weeks, absorbing the optional spring term. This decision had prior approval by the trustees. This required a revision of the teaching schedule and in April 1893 a committee was appointed to revise the schedule. The members of this committee were: Dr. Sawyer, as chairman, Dr. Kitchen, and Dr. Lowman. The latter two men were among those who had come from the Wooster faculty in 1881.

Dr. Weber had given scant attention to his administrative duties since the president had begun to preside at medical faculty meetings, and had not attended a meeting since October 1891. The trustees at their meeting of June 1893, moved to replace this administrative neglect by appointment of an administrative committee of three members of the medical faculty. They chose the faculty committee appointed two months earlier to revise the schedule, and appointed its chairman, Dr. Sawyer, as vice-dean with authority to call faculty meetings and preside at them in the absence of the president. This committee was directed by the trustees to supervise the medical department in all respects for one year and to keep full and accurate records of all actions, thus aiming to correct the evil of the dean dictating the record, not on what had been done by

the faculty, but on the basis of what he wished to be recorded.

During fifty years the medical faculty had elected all its own officers. The appointment of Dr. Sawyer as vice-dean was the first time the trustees had appointed an officer of the medical faculty and inaugurated a policy long followed in that the deans were appointed by the trustees without nomination by the medical faculty until 1928. Dr. Haydn was a member of the Board of Trustees when this action was taken. He had been advised in his correspondence with Provost Pepper in 1889 that this policy had been found advantageous at the University of Pennsylvania. The appointment of the administrative committee and that of the vice-dean came to a meeting of the medical faculty on June 23, 1893. Dr. Weber, the dean, was present for the first time in twenty months.

Another Attempt at Consolidation of the Rival Medical Faculties

The third period of the history of this institution began in 1881 with a partially successful endeavor to unite the two rival regular medical faculties. It closed in 1893 with another attempt, entirely unsuccessful.

The Medical Department of Western Reserve University in 1893 held a position far superior to that of its rival. It had a new, commodius, and well-equipped building, an endowment yielding nearly $8,000 annually, and entire control of the best two hospitals in the city. Its rival was operating in a small old building with little equipment for laboratory teaching. It had a considerable debt of long standing and its major hospital facilities were in a small rented residence. The conditions were promising for consolidating the two educational institutions.

The minutes of the Wooster medical faculty of July 21, 1893 record receipt of "a communication from the Medical Department of Western Reserve University requesting that a committee be appointed to confer with their committee as to the possibility of uniting the two schools" This communication was dated July 20 at the office of Dr. Lowman. It was signed

by Dr. Kitchen and Dr. Lowman, two of the three members of the administrative committee. Dr. Sawyer, the chairman, did not sign.[11] He knew nothing of the sending of the letter until some time later. The Wooster medical faculty appointed its dean, its professor of surgery, and its professor of medicine as a conference committee.[12] This committee sent a letter to the executive committee of the Wooster trustees advising of the proposed negotiations and pointing out the difficulties of the Wooster medical college.[13]

The Reserve medical faculty on July 28 received a recommendation from a majority of its administrative committee for appointment of eight of the sixteen professors of the Wooster faculty to positions on the Reserve faculty. Five of these were to be associate professors and the three members of the Wooster conference committee were to be professors.

Also at this time the promotion of several of the teachers on the Reserve faculty was recommended, some to professorships. The reason given for this large increase in the teaching staff was that more teachers were needed with inauguration of the longer session. This argument was specious, because the requirement would not be for more teachers but for a longer teaching service of each man.

The executive committee of the Reserve trustees acted on these recommendations on August 3, electing to higher positions some of the men already on the teaching staff, while, regarding the new men from the Wooster faculty, the committee voted that "it is not thought advisable to elect them at this time." This was a wise action by the trustees. In view of the experience of the past twelve years it would have been dangerous to introduce into the medical teaching staff a group of eight men who might form another faction.

When the action of the trustees was communicated to the Wooster faculty on August 4, it withdrew all of its nominations. The effort at consolidation had failed.

This episode, inaugurated by Dr. Kitchen and Dr. Lowman, had political implications. The addition of three professors to the Reserve voting faculty, presumably sympathetic with the

Wooster group on that faculty, would have restored to the Wooster group a voting majority in the Reserve medical faculty.

The Final Scene

As soon as the effort at consolidation had failed, negotiations began immediately for some resignations from the Reserve faculty if appointment could be secured on the Wooster faculty. The dean of the Wooster faculty was cautious and wrote early in August to his president asking his attitude toward electing to professorships men who had served recently on another medical faculty. The president replied that such nominations would be approved if the men were capable and their resignations from the other faculty were not dishonorable. This reply, dated August 19, was delayed by being missent in the mails, and was not received until September 3.[14]

The negotiations begun in the early days of August were concealed from the Reserve faculty by the participants. Incidents, however, arose. Dr. Parker resigned as secretary of the faculty on August 10 but did not resign his professorship. Chance remarks in committee meetings gave some hints. As late as September 2 Dr. Kitchen, the political leader in the events that were in progress, participated in a meeting of the schedule committee and approved assignment of teaching hours for the next session to himself and others of his group. He resigned two days later.

The supporters of Dr. Weber had been Dr. Case, Dr. Kitchen, Dr. Lowman, Dr. Parker, and Dr. Smith. With the assurance of appointment on the Wooster faculty, which had reached its dean on September 3, Dr. Kitchen, Dr. Parker, and Dr. Smith resigned on September 4 from the Reserve faculty. Dr. Weber resigned on September 9 and Dr. Case on September 11. All resignations were accepted as soon as received by President Thwing. Dr. Weber claimed in a report published in newspapers in September that he had sent his resignation by mail on August 22. It was not received and failure of the mails between two communities only twenty miles apart was unusual.

The Wooster medical faculty on September 11 nominated Dr. Case, Dr. Kitchen, Dr. Parker, Dr. Smith, and Dr. Samuel W. Kelley, who had been serving in the Reserve dispensary, but

had no teaching title, all to professorships. Dr. Lowman was also nominated, because he was also expected to resign. However, upon the advice of his father he did not resign. When he failed to do so his nomination was withdrawn. The five men nominated were elected by the Wooster trustees who at the same time elected Dr. Weber as an emeritus professor although he had not been nominated by the medical faculty. The election to an emeritus professorship of a man who had not been on the Wooster faculty for twelve years, during which time he had been the leader of a rival medical college, seems incongruous. It was a device to secure his support without giving him active membership in the medical faculty.

The title did not please Dr. Weber. In a few months he resigned, his favorite method to force something he wanted to be done because he had come to believe himself indispensable in the activities of any organization of which he was a part. The resignation of Dr. Weber was laid on the table by the Wooster medical faculty, where it remained for a year. In May 1895 his supporters proposed him for election as dean of the Wooster faculty. Three fourths of the members voted against him. Then his resignation was accepted.[15]

Dr. Weber had done only a little incidental teaching when other professors were absent in these two years. The faculty minutes show that he was little in favor with the members of the Wooster faculty and not at all in favor with its dean. Thus Dr. Weber's connection with medical education in Cleveland ended in final defeat thirty-nine years after he had begun as a temporary professor on the faculty of the Medical Department of Western Reserve College.

The results of the resignations of September 1893 could not be accurately foreseen when they became public. Some of the friends of the Medical Department of Western Reserve University considered it a serious blow and feared that the majority of the students would follow the resigning professors to the Wooster institution. Only thirty of the 112 students who were in the Reserve institution as underclassmen in 1892-93 followed the resigning professors and a few of these returned the next year. The men who resigned were all good teachers but were

immediately replaced with teachers as good and, in some instances, better.

Many beneficial things came to the Medical Department of Western Reserve University in the years from 1881 to 1893; a new building, endowment, improved clinical facilities, and a much-improved curriculum. The resignations of September 1893 merit to be listed among the major benefits in view of what followed. The development that began immediately could not have come without a change of administration and policies, and the removal of the dissension arising between two groups with different ideas of medical educational progress. The resignations removed those opposed to new ideas and permitted a united group of authorities and teachers to lay the firm foundation for the progress of the institution in its second half century.

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BOOK III: ANCILLARY EVENTS

X

BUILDINGS OF THE FIRST HALF-CENTURY

THE MEDICAL COLLEGES founded in the nineteenth century, in nearly every instance, began teaching within a few months after organization, giving insufficient time to erect a building designed for medical instruction. Those that began on the campus of an undergraduate college adapted some college structure to their needs; those not on such a campus were compelled to start in an old residence or in rented quarters in a business structure. The new medical college in Cleveland in 1843 was in the latter group.

The rapid growth of Cleveland following the completion of the Ohio Canal in 1832 brought erection of many buildings designed for business purposes. In 1831 Prospect Street had been extended westward to join Ontario Street. This extension passed through Cleveland's first cemetery on the east side of Ontario Street. This cemetery had been abandoned after the Erie Street Cemetery was opened in 1826.

In 1838 a four-story brick block was built at the southeast corner of Ontario Street and Prospect Street. Part of it was used as a public school until 1841, awaiting erection of a school building in that vicinity. The building was called Mechanics Block. An additional story was put upon it sometime between 1860 and 1880. The building without further exterior change is used as a retail clothing store at present.

In this building the medical college began operation in November 1843 and in it the sessions of 1843-44 and 1844-45 were conducted. The record of interior arrangement is scant. A reference to a "lower lecture room" shows that all or parts of two floors were used. References are made to a dissection room, to a museum, to a library room, and to cabinets containing apparatus and teaching specimens. There was no laboratory instruction except dissection.

The First Medical Building

An essential for the success of the medical department was a building adapted to its use; rented temporary quarters could not be greatly changed. Therefore at the outset plans were made for an "edifice," the designation then used for any public or semi-public building. The catalogue published in April 1844 announced: "It is confidently expected that a New Building, specially devoted to the purposes of the Medical School, will be erected and in readiness for use previous to the next Lecture Term." This was wishful thinking. Six months later the secretary of the faculty announced in the newspapers that the hope of a new building had not been realized "owing to some slight misunderstanding and diversity of opinion among those interested in regard to the most eligible location." He also stated that Leonard Case had "presented to the Medical College a five-acre lot well situated within the city limits," and that "the liberality of others has already supplied a large portion of the funds to meet the contemplated building to be completed during the coming summer."[1] The catalogue published in January 1845 stated that "a building will be erected the present year on the lot presented by Leonard Case Esq." However, plans were changed and a different location was selected.

Leonard Case was the chairman of the Board of Agency and was the wealthiest man in Cleveland at that time. He owned considerable land within the city limits. The five acres he offered were on Pittsburgh Road (now Broadway). I have been unable to determine the exact location. However, because it was "within the city limits" it was less than a mile from the Public Square.

On December 16, 1844 Dr. St. John, Dr. Cassels, and Dr. Jacob Delamater were appointed as a committee to draft a plan for a medical building, and a week later "a plan of building was concluded upon."

A project, long in abeyance, influenced the final choice of a site. Increase in the boat traffic on Lake Erie led the federal government to propose erection of a marine hospital to care for sailors, and in 1837 a commission selected Cleveland as its

site, and bought eight and a half acres of land on the shore of the lake at the foot of Erie Street. There matters rested for several years. Early in 1845 Congress appropriated $25,000 to build the hospital. The medical faculty appreciated the desirability of locating the medical college building near this future hospital. Also it was considered desirable to have it nearer the center of the city where the professors had their offices, than was the site offered on Pittsburgh Road. The federal government began construction in 1847. Much delay postponed the opening of the Marine Hospital until 1852.

Completion of the building fund had lagged. Application was made to the state legislature in December 1844 for an appropriation, which was refused although the state was then giving financial aid to the Medical College of Ohio at Cincinnati. In February 1845 the trustees instructed the Board of Agency to make a contract for erection of the medical building, even if the entire cost had not been subscribed, and to endeavor to increase the subscriptions to at least $8,000. This gives the expected cost of the structure. A site was selected in the spring of 1845.

This site was part of original two-acre lots 172 and 173 of the survey of 1796, located at the southeast corner of Erie and Federal streets. These lots faced the axis of St. Clair Street, which then had its eastern terminus at Erie Street. Federal Street within a few years became an extension of St. Clair Street, which jogged to the north as it crossed Erie Street, as it still does.

The site faced 80 feet on Erie Street and 142 feet on Federal Street. It contained less than a quarter of an acre, small compared to the five acres which Mr. Case had offered to give. Moreover, this area was not given but purchased.

It has long been a tradition that the Perry-Payne family donated the site for the first medical building. Possibly this is a deduction from the fact that Mr. Payne was a member of the Board of Agency, or a confusion with the offer of Mr. Case to give a site for the building. The recorded deed shows that it was not given nor sold for a nominal sum. The consideration

was $1,500. The receipt of one half of this amount was acknowledged in the deed, while the balance was to be paid in five equal annual installments; no part of this balance was paid until after 1848.

The deed shows the grantors to be Nathan Perry and Henry B. Payne and wife. Mrs. Payne was a daughter of Mr. Perry, who had acquired the land in 1825 and later had given an interest in it to his daughter. The deed was signed August 15, 1845. There must have been an earlier land contract, because construction began in May 1845, and a detailed account of the plans of the building was published in the newspapers in early June. The architect was John M. Brown, one of those architect-builders who planned the buildings they erected, a frequent combination of vocations in the nineteenth century. The contractors were Mr. Brown, E. H. Lacey, and Perley Abbey.[2]

The building had a frontage on Erie Street of fifty-eight feet and a depth on Federal Street of eighty-five feet. It was of brick and four and a half stories high. Attention is called to some of the architectural features shown in the illustration here reproduced. Entrance was from broad stone steps on the west face into the second story. The front was ornamented with four Doric columns. On each corner were recessed pilasters extending above the roof edge. Two separate entrances on the north side led into the first story. The third and fourth stories were lighted by twenty-two windows for each floor. The top half story had low rectangular windows except on the front where circular port-hole windows were used.

An architectural feature was an octagonal, domed cupola, thirteen feet in diameter, rising twenty feet from the middle of the roof. The initial announcement stated that this was to be an observatory and that a telescope would be contributed "by our scientific young townsman, Mr. Hamilton L. Smith," who was a graduate of Yale College in 1839, and later became Professor of Astronomy, Natural Philosophy, and Chemistry at Kenyon College from 1854 to 1868, and Professor of Astronomy and Natural Philosophy at Hobart College from 1868 to 1900. Descriptions of the building in early advertisements called this

feature an observatory. However, the proportions were not those of an astronomical observatory; the dome was neither revolving nor hinged; the position on a roof was not sufficiently stable for a telescope; and there was no need to duplicate the observatory already in use on the campus at Hudson. The cupola was useful, but not for viewing the stars nor the surrounding country, because it had no windows.

Many medical college buildings of that period had some type of superstructure designed for the same use as the cupola of the medical college building in Cleveland. The clue to the real use of the cupola is contained in a vote of the faculty reprimanding a student for "removing a subject from its appropriate place in the cupola." Material for anatomical dissection was secured by surreptitious disinterment in some cemetery. Civil officers often searched medical colleges when a grave was found to have been disturbed. The cupola was a place of concealment when such a search impended. In its floor was a trap door reached by a ladder. When an officer came to search he was detained in the office for a time. Meanwhile, the one or several cadavers on hand were taken to the attic and hoisted through the trap door by a block and tackle, the trap door was closed and the ladder hidden. The officer searching the attic found nothing and little suspected that over his head in the inaccessible cupola was the object of his seach. I have found record of similar use of a cupola or belfry in several other medical colleges. This was only one of several types of devices, some one of which was installed in every medical college building for concealment of cadavers.

The plan of the interior was made by Dr. Jacob Delamater.[3] The first floor contained living quarters for the janitor, a cellar, and store rooms. The main features of the upper floors were two large amphitheaters, one with seats for over 400 students, the other somewhat smaller. This shows the size of the student body which was contemplated in an era when the number of students was the chief index of the success of a medical college.

An office and a faculty room were located near the entrance on the second floor. Also on this floor was a small chemical laboratory for the use of Dr. Cassels, who did much work in

commercial chemistry in addition to his teaching. Laboratory work in chemistry for students was not required until forty years later.

The trustees had directed that provision be made for a museum of natural history. Dr. Kirtland had organized the Cleveland Academy of Natural Science in November 1845 and had contributed to it the larger part of his collections made when he had charge of zoology in the Ohio Geological Survey in the late 'thirties. Many other individuals contributed to these collections. This society held its meetings at the medical college and kept its collections there until 1883.

A large room for the natural history museum occupied the front half of the third floor. This was open to the public without charge on two afternoons of each week during the session of the medical college. In addition room was provided for the anatomical and pathological specimens to be studied by the students.

The dissecting room was in the rear of the fourth story, as far as possible from the entrance and also near the cupola. The upper amphitheater was used for clinics, including surgical operations. Its position was related to the fact that in the front of the upper half-story an area was arranged to contain beds for patients used in clinical teaching. These patients were attended by students and by one subordinate teacher who resided in the medical building. Here was the crude beginning of a teaching hospital in a medical college building, something in advance of nearly all medical colleges of that time. There were no other hospital facilities in Cleveland, except the almshouse a mile distant, until the Marine Hospital was opened in 1852. A rule provided that no patient should remain in the medical college building more than a week. The faculty did not propose to make it an almshouse.

Each professor had a private room and some of them were equipped for living, as shown by regulations that the janitor must make the beds for such professors as lived in the building. A library room is mentioned. Rooms for recitations and quizzes were provided. Two stairways led from the two entrances to

the first floor on the north side up to the attic. There was no elevator, a nicety not considered necessary in building construction of that period. Patients for the clinics either had to climb three flights of stairs or be carried. Similarly material for dissection was carried up the stairways.

Heat was furnished by stoves and artificial lighting by kerosene lamps in the early years, supplanted by gas soon after the first provision for illuminating gas in Cleveland in 1848. Natural light came from abundant windows and from a skylight in part of the roof.

This was an attractive building from the exterior when completed, and it was long considered one of the features of the city that should be shown to all visitors. After two sessions were held in rented quarters at the corner of Ontario and Prospect streets, the third session was begun on November 5, 1845 in an unfinished building that was to be the site of the institution for seventy-nine years.

At this time the dean, in a statement referring to the first two years of the institution, said: "Success has been realized in the face of the most persevering interfering and the most unscrupulous opposition."[4]

An editorial in a local newspaper after the building was first occupied said that "the building is excelled by none and equalled by few in the country." The circular of 1848 stated that the building was "believed to be more spacious and more commodious than any other in the country occupied for similar purposes." Visiting medical men at various times highly praised the building for arrangement, facilities, and equipment. It was used continuously from November 1845 to March 1884. In these thirty-nine sessions 3,236 different medical students received instruction, of whom 1,548 were graduated in course. These figures include only those whose names were listed in the catalogues. The names of a considerable additional number are found in the matriculation book, but not in the catalogue, because they did not remain throughout the session. Also these figures do not include additional individuals who attended the supplementary courses of instruction given in many years after

the regular session closed. If these two groups are added they would increase to about 3,500 the number of different persons who received medical instruction in this first building.

I have found no record of the total cost of the building and its furniture. The funds did not pass through the hands of the treasurer of Western Reserve College. They were handled by a separate treasurer of the Board of Agency and his records are not known to have been preserved. Inasmuch as the property was free of taxation, no tax valuation is available. The building was insured for $8,000 and the contents for $2,000 when it was occupied, and before it was fully completed. The vote of the trustees in February 1845 shows the expected cost to have been $8,000. Records of borrowed money indicate additional cost and I estimate that the land, building, furniture, and new equipment cost at least $10,000 and probably nearer $12,000.

The Building Debt

The subscriptions secured by the Board of Agency were not enough to pay for the land and building. Each of six professors loaned the building fund $300 in October 1845, and Dr. Kirtland loaned an additional $200 to build the stone steps at the entrance, a total of $2,000 from the faculty. Dr. Kirtland, Dr. St. John, and Dr. Cassels were appointed in February 1846 "a committee of ways and means to finish the college building this Spring." The trustees authorized a mortgage, which is dated February 13, 1846, to cover a loan of $3,510 from Dr. Kirtland and Zalmon Fitch, a banker of Cleveland and a member of the Board of Agency. This mortgage was paid and cancelled September 4, 1852, when it was replaced by a mortgage for a larger sum.

The liberality of the citizens, who subscribed less than $8,000, was much extolled in the newspapers in connection with the founding of the Medical Department of Western Reserve College and the erection of its building; little was said of the liberality of the members of the faculty. The members of the faculty loaned $2,000 without security in October 1845 to further erection of a building belonging to the trustees; Dr. Kirtland shared in the mortgage loan of 1846. In addition the

members of the faculty gave a library of over 1,000 volumes and their personally owned teaching equipment. This liberality of the faculty continued for over eighty years, during which time members of the teaching staff, chiefly clinical teachers, contributed a large sum in the aggregate. We laud the business men who were donors of endowments; the teachers during a hundred years deserve as much or more praise for their gifts of money and service.

A committee was appointed in October 1846 to inspect the medical building, when finished, to ascertain whether it had been completed according to contract. The final payment to the contractors was made in February 1847. Therefore twenty-two months elapsed between the beginning of construction and the completion of the building. The faculty voted to reduce the debt by annual installments but did little more than pay the interest until 1848.

A faculty minute of February 1848 shows an indebtedness of over $6,300 including the balance of $750 due on the lot since 1845, the $2,000 loan made by the professors in 1845, the mortgage loan of 1846, which had not been reduced, and some unpaid interest. In the next four years the debt was reduced about $1,300 and interest was paid. This was the period of largest attendance in the medical department and of the largest income from student fees.

The Board of Agency, composed of business men appointed in March 1844, resigned in February 1851, and the trustees appointed the faculty as the Board of Agency.

A controversy arose in the departments of the college at Hudson which involved the professor who was on both faculties, and he resigned from the undergraduate faculty in 1852, and became a violent opponent of the president. He had loaned money to the medical department, the real property of which belonged to the trustees. This man demanded payment. The balance on the cost of the building lot had not been paid, nor any of the loans made by the professors in 1845. The mortgage loan of 1846 had been reduced by $1,300. Therefore in September 1852 a mortgage loan of $5,000 was made for ten years at

nine per cent interest, in order to pay all outstanding debts. The creditor was a capitalist of Meadville, Pennsylvania. This loan was renewed but not reduced during thirty-three years.

In 1884 a generous donor offered to erect a new building but would not do so upon land that was mortgaged, nor would the holder of the mortgage consent to tearing down the old building which constituted the major part of his security. In this situation Mr. Oliver Payne, grandson of Nathan Perry and a son of Henry B. Payne, generously offered to pay the debt, and for the first time in forty years the medical college was free of debt when the mortgage was cancelled in the spring of 1885.

The Medical Department of Western Reserve College followed tradition in medical education in being burdened by a building debt. The history of many medical colleges shows erection of buildings before the entire amount necessary to pay for them was secured. A building debt resulted and in other instances than in Cleveland it continued until a new building was needed. One facetious writer, referring to this common experience, said that apparently no medical college could thrive except under the shadow of a building debt.

The New Second Medical Building

An attendance of nearly two hundred students in 1881-82, the first year under the united faculty, gave promise of further increase in the future.

The gift of an endowment to the undergraduate college raised a hope that endowment might be secured for the medical department, and at the first meeting of the united faculty in July 1881, a committee was appointed to seek endowment; it met with no success.

The immediate need was for more space for teaching and for more private rooms for the teachers. The building erected in 1845 had private rooms for only six professors, quite inadequate to meet the desires of the sixteen professors of 1881-82. The need for room increased in 1882-83 and the urgency is shown by the fact that in February 1883 the faculty was ready to abandon its natural history collections which had been stressed

as an important item of teaching equipment in the catalogues of the medical department since 1845.

In March 1883 the medical faculty offered to give its natural history collections and the cases containing these, to Adelbert College. They were not accepted because the museum room at Adelbert College was already crowded and no member of the faculty of Adelbert College at that time was interested in natural history.

Following this refusal, the parts of the collections that were on deposit were returned to their owners and the parts which had been assembled by Dr. Kirtland—at that time no longer living—were stored in a small room in a business block where they gathered dust and vermin for eleven years. I was an assistant in biology in Adelbert College from 1892-95 and in December 1894 I moved these collections from Case Block on Superior Street to Adelbert College, cleaned and relabeled the specimens, and installed them in cases in the museum. Some specimens were so badly damaged that they could not be rescued. These collections were removed to the Biological Laboratory when it was occupied in 1901, where they are today on exhibition, some of the specimens nearly a century after first being deposited in a building belonging to Western Reserve College. Also in 1901 some of the deposited collections which had been taken from the medical building in 1883 were returned to the university as a gift.

The removal of the natural history collections from the medical building released nearly half of the third floor. This space was converted into a dissecting room in the summer of 1883 at a cost of $700; this change met one urgent need for expansion of teaching facilities.

In March 1883 the faculty applied to the trustees for permission to erect an addition to the medical building to be used as a dispensary and asked appropriation of part of the cost. The trustees consented to erection of a building on St. Clair Street adjoining the medical building, but provided no funds. It was not built.

The optional graded course first offered in 1880-81 had each

year attracted an increasing number of students. In 1883-84 one fifth of the students were enrolled in the graded course. It was evident that the time was approaching when the graded course would be required of all students. This would bring serious problems regarding teaching space.

As long as the traditional plan of teaching should continue, in which all students attended the single course of instruction given each session, the two amphitheaters in the building would suffice. However, when there should come to be three classes in a graded course the need was imperative for three lecture rooms so that the three classes could receive instruction in three places at the same hours.

In addition Professor Morley wished to expand his optional laboratory course in chemistry, which had been given for more than fifteen years to a group limited in number because of space. He had been giving a required laboratory course in chemistry in the undergraduate department for fifteen years and believed that such a course should be given to all medical students.

Extensive structural changes would be required in a building that was thirty-nine years old, and an addition must be built for the dispensary to meet needs in prospect in the near future. The opinion developed that instead of attempting structural changes and an addition to an old building, it would be better to seek a new and larger medical building. On January 8, 1884 the medical faculty appointed a committee of six to interview "prominent gentlemen and see what could be done towards raising a permanent endowment and funds for a new college building." Results were rapid in the next three months.

The committee reported on February 23, 1884 that Mr. Hinman B. Hurlbut, a trustee, had started the subscription with $10,000, that the owner of adjacent land would donate twenty-five feet frontage on Erie Street to permit erection of a larger building, and that Mr. John L. Woods had said that he would "give as much as anybody when the subscription was well started."

Mr. Hurlbut had been a trustee and constant friend of West-

ern Reserve College for twenty years. In 1864 he had endowed the professorship of chemistry and natural history in the undergraduate department. He had urged the union of the medical faculties that occurred in 1881. He had been President of the Board of Trustees of Cleveland City Hospital—a private philanthropy and not a municipal institution—for eighteen years, where the medical faculty had full teaching privileges after Mr. Hurlbut became the president, and he had personally paid the greater part of the cost of building an amphitheater at that hospital in 1880 to improve teaching conditions.

The faculty placed much hope in the influence of Mr. Hurlbut in raising money for a new building because he was widely known in business and enjoyed the full confidence of the public. The confidence of the faculty is shown by appointment of a building committee on March 5, 1884. Then came a disaster in the sudden death of Mr. Hurlbut on March 22, 1884 at the age of sixty-six years.

The charter of Western Reserve University was issued on April 4, 1884. On the same day the faculty was told by Dr. Thayer that "in conversations he had had with a prominent lawyer he had been assured that a well-known gentleman of the city was prepared to make a valuable donation to the college and moved that a committee . . . be appointed to engage architects, draw plans, and do whatever in their judgment seemed best."

The building committee which had been appointed a month before was modified in membership and the first two names on the new committee were those of Dr. Weber, the dean, and of Dr. Thayer. The "prominent lawyer" was Jarvis M. Adams, personal attorney of John L. Woods, and a close friend of Dr. Thayer.

The position of the name of Dr. Thayer in the new committee and the fact that he, instead of the dean, first informed the faculty of the gift suggests that Dr. Thayer, through his friend Mr. Adams, had as much to do in securing the gift as did Dr. Weber, who has long been credited as the sole actor in this rôle. Although the fact of the gift was immediately published in

local newspapers, the identity of the donor was not made public for some time.

On April 15, 1884 the house committee of the faculty was instructed "to move the effects in the college building to some suitable place for storage and arrange for a dissecting room for the coming winter." This action shows intention to begin building operations immediately. Although the furniture and apparatus were removed from the building and stored in April 1884, the beginning of construction was delayed for a year. This was due to a disastrous fire in the mill and lumber yards of Mr. Woods, who had offered to erect and pay for a new building. He needed his ready money to restore his losses by fire and therefore, with the full consent of the faculty, postponed the beginning of building until April 1885.

Mr. Woods in February 1884 had said that "he would give as much as anybody." Perhaps moved by the loss of leadership in the death of Mr. Hurlbut, Mr. Woods consented to give the entire amount to erect a new building. The faculty received this information two weeks after the death of Mr. Hurlbut. This action of Mr. Woods was similar to that of Mr. Amasa Stone in his gift to Western Reserve College in 1880 to enable it to move to Cleveland in 1882. Mr. Stone first said that he would be one of four to give the needed amount. A year later he offered to give the entire amount.

The year from April 1884 to April 1885 was occupied in drawing plans for the new medical building, which included many conferences with Coburn and Barnum, the architects. Professor Morley, the only man on the medical faculty who was not a practicing physician, was a member of a building committee appointed in March 1883, chairman of the committee appointed in March 1884, and a member of the new committee of April 1884. An interesting sidelight on the planning of the building is found in a private letter of Professor Morley to his father under date of April 25, 1884. He wrote: "Most of the medical men have little idea of what is needed, and are ready to fall in with almost anything that is suggested, so that a greater

The First Building Occupied from 1845 to 1885

The Second Building (at the left) Occupied from 1887 to 1924, and (right) Chemical-Physiological Laboratory from 1898 to 1924

responsibility rests on Dr. Bennitt and me, who do most of the planning for the rest. We plan, the architects draw out the plan, and the rest see if the plan meets the wants of each professor. Dr. Bennitt drove out here tonight and we looked for two hours at a plan which he has drawn out since Tuesday."

This gives no indication of viewing medical buildings in other cities and shows that two of the six members of the building committee were mainly responsible for the arrangement of the building as erected. Mr. Morley, a mathematician and physicist as well as a chemist, and adept in draftmanship, probably had larger influence than Dr. Bennitt.

The final plans of the architects were approved January 21, 1885. The faculty directed, on March 6, 1885, that a photograph of the old building be taken. The picture reproduced earlier in this chapter was reported a week later to have been taken.

The old building was demolished in April 1885 and erection of the new building began in May 1885. Unexpected difficulty was met when a bed of quicksand was found under the northwest corner of the site; the cornerstone was not laid until July 11, 1885 when an extensive program was carried through.[5] Many years later the foundations settled slightly, when a large sewer was constructed in the adjacent street, causing a crack in outer walls of the front.

The plan of the interior of the new building appears to have been based on the arrangement in the old building. Amphitheaters, dissection room, museum, faculty room, library, janitor's quarters, interior stairways, and entrances were in the same position in both buildings. The main entrance of the new building was from Erie Street by a series of stone steps in a recessed covered archway. These were in the same position as the open porch and steps of the old building.

The new building had a frontage on Erie Street of eighty-four feet and extended one hundred and forty feet on St. Clair Street; it was twenty-six feet wider and fifty-two feet longer than the old building. The height was also greater. The ground

area was a little more than twice that of the old building and the cubic content about three times greater. The greater width was occupied by a wide hallway extending from the first floor to the roof. The greater length gave space for an extra lecture room, for laboratories and store rooms, for a lounging room for students, and for a suite of dispensary rooms in the basement story.

The external walls were of brown sandstone from a nearby quarry. Abundant large windows gave ample daylight illumination. A large skylight occupying half of the roof lighted the large amphitheater and the hallway. Artificial lighting was by gas, supplemented after ten years by electricity.

The construction was "slow burning." An interior structural wall, four feet thick, provided room for a well in the wall in which cadavers were suspended on hooks when it became necessary to conceal them. The hall floor was of marble and the interior finish throughout was of natural white oak. Mr. Woods was a large dealer in hardwood lumber. Heating was by steam, and ventilation was secured by conduits in the walls with air driven by fans operated by a gas engine. A hydraulic elevator was provided.

The central feature was an amphitheater extending through two and a half stories and with seats for five hundred persons. A smaller amphitheater and a lecture room each had seats for over two hundred persons. These three assembly rooms occupied a third of the building. The medical college had never had over three hundred students, but this was an era when the medical schools aimed at quantity of students rather than quality. Also some clinical teachers of that time had a desire to lecture to large audiences. The professor of surgery and the professor of medicine in the Medical Department of Western Reserve University at this time had that desire, and hoped to attract to their lectures many medical practioners in addition to the enrolled students.

When this building was planned it was not appreciated that methods of medical teaching were soon to change. Had the

building been delayed five years it is probable that the interior arrangement would have been far different. The large amphitheater came to be an embarrassment when, within twenty years, some classes contained only a dozen students.

The influence of Professor Morley is shown in the arrangement. The entire second floor was given to chemistry, the subject which he taught, with a lecture room seating over two hundred persons, two chemical laboratories, two store rooms, a room for the professor and another for his assistant, each twice the size of any room assigned to other professors.

The third floor contained a dissecting room located as far from the public entrance as possible, a museum, and a laboratory for pathology and histology, half the size of the museum. A laboratory for physiology and one for experimental therapeutics were located on the first floor. The assignment of rooms shows that in 1884, when the plans were drawn, the faculty proposed to introduce laboratory courses in chemistry, histology, pathology, pharmacology, and physiology. It was ten years before all of these laboratory courses were in operation. No mention was made of bacteriology in 1884, a subject then in its infancy.

Eleven small rooms were provided for professors who now numbered fourteen. The fourth half-story was not finished until five years after the building was occupied. It was occupied by the dental department from 1892 to 1896 and thereafter by pharmacology. Complete floor plans of the building were published in the catalogue printed in the spring of 1886 and repeated in that printed in 1887.

The catalogue printed in the spring of 1885 stated, regarding the building, that "it is hoped that it may be ready for occupancy in the Autumn." A year later the catalogue stated: "The building is to be completed and opened for students in September of this year. . . ." The prophecy was not fulfilled. In October 1886 the faculty urged that at least one lecture room be completed at once. The private rooms were assigned in November 1886. The rooms for the dispensary and the adjacent small amphitheater were completed so that the first teaching

in the building was on January 17, 1887. The first faculty meeting in the building was on March 5, 1887 and the building was occupied for all classes in September 1887.

During the session of 1884-85, before construction was begun, and during 1885-86 and 1886-87 instruction was given in part at Charity Hospital but mainly at the Cleveland City Hospital at the corner of Erie Street and Lake Street (now Lakeside Avenue). A temporary structure was built on the grounds of this hospital for the teaching of anatomy.

Commencement of 1887 came on March 7 and the next day the new building was dedicated. The principal address was by Dr. George M. Sternberg, a graduate of the College of Physicians and Surgeons of New York City in 1860 and in 1887 Assistant Surgeon General of the Army. He had been in charge of the army hospital in Cleveland during part of the Civil War.

The building, of modified Romanesque architecture, was one of the most impressive structures in Cleveland when it was dedicated. It was considered one of the best medical buildings in the United States at that time and was described and praised not only in medical journals but also in the lay press, including an illustrated description in *Harper's Weekly*.[6]

The bills for construction did not pass through the books of the university treasurer and no accurate record of total cost is available. The donor of the building made the contracts and paid the bills. The cost was approximately $240,000.

The building was occupied from September 1887 until June 1924, during thirty-seven sessions. In this time many changes in occupancy of the rooms occurred, so that in 1924 only the dissecting room had the same occupant that was in it in 1887. After the School of Medicine was removed in 1924, to a new building adjacent to the university campus four miles distant, the old building was vacant for five years. In 1929, because the property was no longer used for educational purposes, it was returned to the tax duplicate. In that year this building, and two accessory buildings erected later, were demolished. These accessory buildings were erected in the second half-century and will be described in chapter XV, dealing with the history of the

school from 1893 to 1910. No new structure has arisen on the site, which, first acquired in 1845, is still owned by the university. Since 1929 the ground has been rented and has been used as a parking lot for automobiles.

References

1. *Cleveland Herald,* Oct. 30, 1844.
2. *Ibid.,* June 4, 1845, p. 2, col. 1.
3. *Loc. cit.*
4. *Ibid.,* Oct. 15, 1845.
5. *Cleveland Leader and Cleveland Plain Dealer,* July 12, 1885.
6. *Harper's Weekly,* XXXI, 206, col. 2 (Mar. 19, 1887).

XI

CLEVELAND HOSPITALS AND MEDICAL TEACHING

THIS CHAPTER is a sketch of hospitals which were extensively used for teaching by the School of Medicine of Western Reserve University, the first recorded use being ninety years ago. It does not pretend to be a history of all the hospitals of Cleveland nor even of all those used by the Medical School, but only of those institutions, under some changes of name, that were considerably used. They are treated in chronological order of what may be called their birth rather than their establishment. Other hospitals related to the rival regular medical colleges are mentioned in chapter XIII, and those connected with the homeopathic medical colleges are treated in chapter XIV.

The first hospital in Cleveland was built early in June 1813, a structure of logs located a short distance from the eastern bank of the Cuyahoga River near its mouth. Captain Stanton Sholes arrived with a company of troops of the regular army late in May 1813. He found throughout the village a considerable number of sick and wounded soldiers who had been at Detroit at the time of Hull's surrender. All were poorly quartered.

Captain Sholes had been ordered to build a fort immediately upon his arrival, but before doing so he built a hospital in the area within the stockade of the future fort from logs of chestnut trees felled on the spot. The fort when completed was named Fort Huntington in honor of Samuel Huntington, Governor of Ohio from 1808 to 1810. He was the second elected governor of the state and the only one from northern Ohio until 1849.

The hospital was "thirty by twenty feet, floored with chestnut bark with two tiers of bunks around the walls . . . the bunks well strawed."[1] The patients received care from the "village physician," who must have been Dr. David Long, then the only physician in Cleveland. This hospital was used for about two years and then abandoned and soon demolished.

The City Hospital

The present municipal hospital claims an age of over a hundred years, but not until 1891 was it what we now recognize as a hospital. However, one can put its birth back to over a hundred and ten years ago.

Cleveland was until 1814 a hamlet within a township, and was incorporated as a village in 1814 when its inhabitants numbered about one hundred. Sometime before 1830, probably shortly after 1825, a township poorhouse was built on a site that now lies within the eastern part of Erie Street Cemetery facing the present East Fourteenth Street. The village was incorporated as a city in 1836, and in 1837 the name of the almshouse was changed to "city hospital." The change of name did not change its character. It remained an infirmary for elderly people with chronic illnesses. The building was a wooden structure two stories in height and seventy by thirty feet in area. A superintendent, a warden, and a visiting physician, conducted this institution. In 1837 there were twenty-five inmates.

Dr. Horace A. Ackley, who became the attending physician soon after his arrival in Cleveland in 1839, held the position when the medical school opened in November 1843, and continued to hold it for several years. There is no record that students visited this institution in the early years, but there is record that some of its inmates were shown to students at clinics in the first session of the medical college. Therefore, one may provisionally say that this medical school had crude hospital connections from its origin.

The wooden structure was demolished in 1851 and some of the inmates were transferred to a rented building. In the same year the city bought eighty acres of farm land on the South Side, designed for employment of the inmates in farming, and later the city erected a new brick building. This building was called an infirmary rather than a hospital. It was completed in 1855 and forty patients were transferred to it.[2] The first city physician in charge of the new infirmary was an alumnus of the medical college. Dr. Gustav Weber, who joined the medical faculty in 1856, was city physician from 1857 to 1860. During these years

the catalogue carried the statement: "The Professor of Surgery being physician to the City Infirmary, all cases of interest occurring there are exhibited to the class—as well as those at the Marine Hospital under direction of the Hospital Surgeon."

This is the second definite record of the teaching of classes of this medical school at a hospital, being preceded by four years by a similar record to be mentioned later in this chapter. The city physician, who controlled the teaching material at the City Infirmary, was usually an alumnus of this medical school from 1864 to 1891, sometimes a member of the teaching staff. In 1858 there were 187 inmates of the City Infirmary.[3]

The number of patients at the City Infirmary continued to increase until by 1891 the number had reached nearly five hundred, the majority of them mental cases.[4]

The increase in number of inmates brought some structural additions to the infirmary in the 'seventies. In 1887 the city council authorized construction of a general hospital to contain 150 beds at a cost not to exceed $60,000. This was erected near the infirmary buildings and while being built was officially named City Hospital, the name that had been used for the Infirmary from 1837 to 1851. When completed in 1891 it had 175 beds.

Care is necessary not to confuse the City Infirmary and the new City Hospital unit with the Cleveland City Hospital, an organization that existed from 1866 to 1889. The latter was a private philanthropy without municipal financial support and entirely distinct from municipal institutions.

When City Hospital was opened it had no staff, the medical care of patients being committed to the city physician. Because of loss of early records, the date of organization of a medical staff is uncertain. On July 1, 1891, the faculty of the Medical Department of Western Reserve University voted "that Dr. Lowman be appointed to the staff of the City Hospital as a medical consultant." Record has been found that Dr. William T. Corlett, Dr. John P. Sawyer, and Dr. Henry S. Upson, members of the medical faculty, were members of the visiting staff of City Hospital in 1892-93. The first appearance in the medical

Marine-Cleveland City-Lakeside-Marine Hospital in 1880

St. Vincent de Paul's (Charity) Hospital in 1880

college catalogue of the names of the members of this staff was in the issue published in the spring of 1895, when seven faculty members are listed. The first evidence in the catalogues of medical students being taught at City Hospital is for the session of 1892-93. Uncertain recollections of men now living place the first teaching in 1890-91 or 1891-92. An interne was appointed as early as the fall of 1891.

The control of teaching privileges was divided with the rival regular medical college and the homeopathic colleges. At first this division was by assignment of certain wards to each medical college. However, resulting confusion soon brought a change to entire control by each medical college for a definite number of months each year—for four months in the case of the Medical Department of Western Reserve University.

A building plan was formulated in 1910. Three additional buildings were erected in 1914. Other buildings have been erected since 1919, until now there are seventeen buildings, representing a cost of over eight million dollars, with a total service personnel of 1,200 employees. It is now the sixth largest general hospital in the United States. The number of patients in 1940 was over 15,000 and the number of patient days over 445,000. Visits to the outpatient department in that year were in excess of 162,000.[5] The statistics for 1943 are not far different. The hospital now has 1,590 beds.

The use of City Hospital for instruction of students of the School of Medicine of Western Reserve University gradually increased in the four months of each year in which this medical school controlled the clinical material. The consolidation with the Medical Department of Ohio Wesleyan University in 1910 extended the control to eight months, and in 1914 a contract was made between the university and the city, under which the School of Medicine of Western Reserve University acquired all the teaching privileges throughout the year and nominated the entire professional staff. This relation is still operative. City Hospital has become the largest clinical field of the medical school and also the most varied because it has divisions for contagious diseases, for nervous diseases, and for tuberculosis, none

of which diseases is accepted in the other hospitals used for teaching.

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Temporary hospitals were organized in Cleveland during the epidemic of Asiatic cholera in 1832, before the medical college was founded, and again during the similar epidemic of 1849, six years after that founding. Although the temporary hospital of 1849 was directed by the medical faculty, no instruction of students was given there because the hospital existed only in the summer and early fall months, when the medical college was not in session.

United States Marine Hospital

The completion of the Erie Canal in 1825 and of the Ohio Canal in 1832 brought rapid increase of population in the states of the Middle West and also augmented the water-borne traffic on Lake Erie, the Ohio River, and the Mississippi River. In 1835 the legislatures of Illinois, Indiana, and Ohio petitioned Congress for "erection and support by the General Government of hospitals on the western waters and lakes for relief of persons engaged in commerce." In 1837 a commission of three army officers was appointed to secure not more than seven inland sites for hospitals, one of them to be on Lake Erie.

This commission chose Cleveland as the location of the first marine hospital on the Great Lakes, and in 1837 purchased eight and a half acres on the shore of the lake immediately East of Erie (now East Ninth) Street. Because of delay in appropriations, the purchase price of $12,000 was not paid until 1842. In March 1845 Congress appropriated $25,000 to erect a hospital of fifty beds following plans drawn by a government architect. The imminence of this building activity was the major influence in the choice a month later of the site for the first medical college building, which has been described in chapter X.

Construction began in 1847 but was much delayed by discovery of a bed of quicksand in excavating for the foundations. This demanded deeper foundations than had been expected and increased the cost. Further delay came in securing ap-

propriations to meet increased cost beyond the original appropriation of $25,000. Five years were spent in completing this building. It was a stone structure of three stories, 110 feet by 90 feet in area. The cost of the building was $87,703.66. The total cost including land, grading, and fencing was over $119,000.[6] It was opened for patients in 1852. Repairs before 1874 had cost $22,363.08.[7]

While construction was in progress an area next to the shore of the lake was leased to railroads which planned to enter the city along this area and were built in 1851 and 1852.

This hospital was used by the federal government for hospital purposes from 1852 until 1875, when it was leased to a private corporation for hospital use. The federal government resumed operation in May 1896 and continued until a new building was constructed on high ground in the eastern part of the city, four and a half miles from the original location. The land and old building was sold in 1926 to the Pennsylvania Railroad Company for $2,000,000, with privileges of occupation by the hospital until its new building was completed. Removal was on July 1, 1930 to a hospital that now has 306 beds. The old building was demolished in 1931.

The first appointed superintendent of the United States Marine Hospital was Dr. Charles R. Pierce, a graduate of the medical college in 1848. He was a son of Rev. George E. Pierce, at that time the president of Western Reserve College. The long delay in construction of the building brought the resignation of Dr. Pierce from the superintendency and removal to another town, before the hospital was opened. The first superintendent after the hospital was opened remained only a few months and was succeeded in April 1853 by Dr. Horace A. Ackley, Professor of Surgery in the medical college.

The catalogue of the medical college issued in January 1854 states: "The Professor of Surgery, being Surgeon of the United States Marine Hospital situated within a few rods of the College, all cases of interest occurring there are brought before the class." This record, when the medical college was ten years of age, shows that the medical students were taught in at least one

hospital beginning at the latest in November 1853, more than ninety years ago. Inferential evidence already mentioned dates crude hospital relations back to the founding of the medical college in 1843.

Dr. Ackley resigned from the faculty in 1856 and a year later from the marine hospital. An alumnus of the class of 1847 became the surgeon in charge but was not a member of the teaching staff of the medical college. However, the statement quoted in the preceding section shows that students were taught in this hospital until 1860 or later. Collateral evidence shows that they were also taught there during the years of the Civil War, when part of the hospital, as well as a temporary building erected upon the hospital grounds, was used for soldiers. The medical care of the soldiers was by members of the medical faculty. Also during the Civil War a hospital was maintained at Camp Cleveland in a suburb of the city, and record exists that medical students visited this hospital and received some instruction. Therefore definite evidence exists of teaching of medical students in hospitals from 1853 to 1865, probably without interruption.

The surgeons in charge of the Marine Hospital were local physicians until 1881, when commissioned federal officers were appointed to this position. Most of these local physicians were alumni or members of the medical faculty and the sailors who were patients were used to some extent in the instruction of medical students.

Two figures are given for the capacity of the hospital. One record says fifty-nine beds, but more often the statement is seventy beds, with a maximum extension to one hundred and forty beds in case of an epidemic.

Cleveland State Hospital

This hospital, located in a suburb of Cleveland and now having a capacity, with accessory buildings, of 3,000 inmates, has been throughout its history entirely devoted to mental cases. Its founding and its opening in 1855 under the name of the Northern Ohio Insane Asylum has been mentioned in an

earlier chapter, as has also the part of Dr. Horace A. Ackley, Professor of Surgery in the Medical Department of Western Reserve College, in its establishment. The name has been changed several times in nearly ninety years, and new buildings have been constructed. Many of its superintendents have been alumni of the Medical Department of Western Reserve College, and throughout its history it has been used incidentally by the teachers of nervous diseases, who occasionally have taken classes on visits to it. However, its use has not been emphasized in the systematic course of the curriculum except during those few years when its superintendent was a member of the teaching staff. The catalogues of recent years mention only that it is available through courtesy of members of its staff.

St. Vincent de Paul's (Charity) Hospital

The inhabitants of the hamlet and village of Cleveland up to 1825 were predominantly of New England origin, and their church affiliations were with the Congregationalists and Presbyterians. Practically all who claimed any church affiliations were Protestants.

The digging of the Ohio Canal, which began in 1825, brought in a large number of Irish laborers, nearly all Catholics. The first Catholic church was built in 1838, and in 1847 the Catholic diocese of northern Ohio was established with Rev. (Louis) Amadeus Rappé as its first bishop from 1847 to 1870. Bishop Rappé was French by birth and education. In 1850 he brought to Cleveland four French nuns, who in 1852 established the beginning of St. Vincent's Orphanage. In 1856 Bishop Rappé established a convent of the Sisters of Charity of the Immaculate Conception, and these sisters about 1857 opened a small hospital under the name of St. Joseph's Hospital, which was closed after two years.

The order of the Sisters of Charity was founded in Paris in 1629 by Vincent de Paul (1580-1660), a Gascon priest who gave much attention to the care of the sick, and the Sisters of Charity have for more than three hundred years been especially connected with nursing. He was canonized in 1737 as St. Vincent

de Paul. A hospital of St. Vincent de Paul was opened in Paris about 1750.[8]

The only permanent hospitals in Cleveland in the early 'sixties were the City Infirmary and the United States Marine Hospital. Many sick and wounded soldiers resident in Cleveland were being returned from army base hospitals and there was inadequate room for their hospitalization in Cleveland. In May 1863 Bishop Rappé proposed to the city council that the municipality erect a hospital to care for soldiers, and offered to furnish the nursing by the Sisters of Charity.[9]

The City Council did nothing more than appoint a committee of conference. A week later an editorial discussed the location for a hospital,[10] and in another week an editorial appeared opposing a hospital with which any Catholic order should be connected, but advocating establishment of a nonsectarian hospital because nine-tenth of the taxes were paid by Protestants.[11]

Bishop Rappé later said that he had gone to Dr. Gustav Weber, Professor of Surgery at that time in the Medical Department of Western Reserve College, and that he and Dr. Weber had prepared the plan that was submitted to the city council.[12]

The plan for a hospital to be built by the municipality failed, largely because of protests against any arrangement that involved an agreement between the city and the bishop of the Catholic diocese.

One cannot understand the beginnings in the 'sixties of two present prominent hospitals of Cleveland without attention to the fervor in the various church denominations of that time, with some antagonisms between different groups.

Lacking action by the municipality, the plan was changed to secure funds for erection of a hospital by private contributions. The appeal was on the basis of a charitable institution and emphasized by the patriotic motive of care for soldiers. "At the instigation of Dr. Gustav Weber and others public meetings were held to devise ways and means."[13]

Bishop Rappé offered to build a hospital and provide the Sisters of Charity to care for the nursing if the citizens would furnish adequate financial support. Dr. Weber was active in

the solicitation of gifts. He had been Professor of Surgery in the Medical Department of Western Reserve College from 1856 to May 1863, had served for a short term in 1862 as Surgeon General of Ohio, and was a leader among the Germans, some of whom were men of considerable wealth.

The Catholics included few who could give any substantial amount. However, Bishop Rappé secured many small contributions in the churches of his diocese. The great part of the contributions came from Protestants. The prominent givers were William Bingham, William J. Gordon, Henry B. Payne, Joseph Perkins, Daniel P. Rhodes, Amasa Stone, George Tod, and Jeptha H. Wade.[14] These men were prominent business men of Cleveland. Mr. Perkins was a trustee of Western Reserve College and made a liberal contribution with the understanding that the teaching privileges in the proposed hospital should be under the control of the medical department of that college.

Subscriptions were speedily secured, and on June 23, 1863 a site for the hospital was purchased on Perry Street, now East Twenty-Second Street. The deed was recorded in the name of Bishop Rappé. Construction began soon after. However, completion of the building was delayed, and two years later it was stated that the building was nearly completed when Bishop Rappé made a public appeal for $10,000 to finish and furnish the building.[15] The patriotic appeal lost its force when the war ended in April 1865.

The building was of Franco-Italian architecture. It stood on the east side of Perry (now East Twenty-Second Street) and faced west. The main building was one hundred and fifty feet long from north to south. From its east wall two wings extended eighty-eight feet and between them was a shorter ell which accommodated the chapel. The form of the building was that of the letter E. The building was of brick, three stories high, except the tower, which was five stories. During the solicitation for funds it was stated that the capacity would be 150 patients, capable of extension to 200 in case of an epidemic. However, after the building was occupied it was repeatedly stated that the capacity was "about one hundred beds."

The hospital was dedicated on October 10, 1865 and the first

patients were admitted soon after.[16] A local newspaper on November 9 reported twenty-eight patients in the hospital. Throughout the campaign for funds, beginning in May 1863, emphasis was placed on the promise that it was to be a charity hospital and it was commonly called Charity Hospital during its building. However, when it was dedicated Bishop Rappé announced that the name was the Hospital of St. Vincent de Paul.

There was public disappointment at the abandonment of the name of Charity Hospital, under which name many citizens had subscribed to build the institution. Many continued to use the early designation, which has now become the popular name. .This disappointment was expressed in an editorial and in a communication in a local newspaper within a few days after the dedication of the new hospital. Another and much more important reaction will be described in the next section of this chapter.

The original cost of the hospital was $72,000, of which about $20,000 was unpaid at the time of dedication. This cost has been increased by many additions. Additions from 1873 to 1891 cost $50,000, one in 1898, $25,000, another in 1902, $45,000.[17] Extensive additions of service buildings and dormitories in 1912 cost over $100,000. In 1873 a branch was established on a neighboring street under the name of St. Ann's Maternity Home. The present capacity is 300 beds, of which approximately one third are free beds. A dispensary was opened in 1894, and has been in operation for fifty years.

The hospital through seventy years stated its founding to have been in 1865, the year of dedication and opening. Its sponsors in recent years have set the date back to 1850. This was the year when the first group of Sisters of Charity arrived. No actual hospital was organized until 1857 and that one was temporary and closed within two years.

Comparatively few persons know the full name of the Hospital of St. Vincent de Paul. In the early years it was called St. Vincent's Hospital but more and more came to be familiarly designated as Charity Hospital. Therefore in reference to this institution in other chapters at dates later than 1870 I call it

Charity Hospital. The form now in use is St. Vincent's Charity Hospital.

When the solicitation for funds was in progress it was expected that the teaching privileges would be controlled by the Medical Department of Western Reserve College and at least one large subscription was made, as already mentioned, with that understanding. In the summer of 1864 Bishop Rappé announced that the chief of staff would be Dr. Gustav Weber, who had recently been dismissed from the medical faculty, and he was permitted to exclude the Medical Department of Western Reserve College from the new hospital and to use the hospital as the basis of a private rival medical college, notwithstanding that members of the faculty of the Medical Department of Western Reserve College had contributed personally towards its building and had solicited subscriptions from their friends.

During thirteen years after the opening of the hospital the members of the medical faculty of Western Reserve College were denied entrance for teaching. In 1878 partial teaching privileges were secured under a new bishop, and in 1884 he gave to the medical college the sole teaching privileges in Charity Hospital, which have now been continued for sixty years. From 1884 to 1898 Charity Hospital was the largest clinical teaching field controlled throughout the year. From 1898 to 1930, although not the largest field, this hospital was extensively used in teaching. Since 1930 its use in the teaching of medical students has diminished, but Western Reserve University still nominates the staff which the bishop appoints.

The University Hospitals

The group of institutions now known as University Hospitals consists of three component units and one affiliated unit. Each arose independently in a different location. They continued to operate under different boards of trustees until 1925, when an operating holding corporation was formed with its trustees assigned from the separate boards of trustees. In 1940 this was succeeded by a merger of three of the boards of trustees, one remaining separate as an affiliate.

The oldest unit is the general hospital, which has been officially Lakeside Hospital since March 1889. Some events prior to the first organization seventy-seven years ago merit mention because they were direct preliminaries to the first hospital unit.

In 1863 the Ladies' Aid Society of the First Presbyterian (Old Stone) Church established in a rented house on Lake Street—now Lakeside Avenue—the Strangers' Home. It was designed as a shelter for transient women, a wayfarers' lodge. This enterprise was enlarged a year later into the Home for the Friendless, not restricted to women, and supported by both men and women of the same church. Later this was called the Protestant Home and Hospital, and still later the Protestant Home for Friendless Strangers.[18] It had a visiting physician.

The Soldiers' Aid Society was organized in 1863 entirely by Protestants. Its object was the care of sick and wounded soldiers returning from the Civil War. Through the efforts of a member of Congress, a citizen of Cleveland, the use was secured of an unoccupied wing of the United States Marine Hospital. This was furnished for hospital purposes and maintained by the Soldiers' Aid Society. Also a temporary structure was erected upon the grounds for the care of soldiers. This was officially designated as the Army Hospital of the United States Marine Hospital. Medical attendance was given by the members of the faculty of the Medical Department of Western Reserve College. The clinical material was used for teaching medical students. This medical effort continued for some months after the end of the Civil War, until all soldier patients could be discharged. The three organizations just mentioned were all temporary and were connected with conditions arising from the Civil War. The first two were benevolences of a single church; the Soldiers' Aid Society had a wider support.

Other events besides change of name in connection with the Hospital of St. Vincent de Paul were criticized. Before the plan for building that hospital was inaugurated there had been occasional public reference to the need of a hospital in Cleveland in addition to the meager facilities of the City Infirmary.

This sentiment was crystallized in a long communication in a local newspaper on the day before the dedication of the Hospital of St. Vincent de Paul, in which the writer suggested that if the federal government would sell its Marine Hospital it would be an excellent idea to purchase the grounds and buildings and convert the federal hospital into a general public hospital.[19] Communications of similar tenor appeared frequently in the newspapers during the next seven months.

The first of a series of events which led to the Lakeside Hospital came on May 10, 1866, when at a public meeting the Cleveland Charity Hospital Society was organized. At another meeting four days later the name was changed to the Cleveland City Hospital Society.[20] The Society was chartered on May 21, 1866 under the name of the Cleveland City Hospital, with a president, a clerk, and seven trustees, all prominent citizens of the city.[21] The president was Mr. Joseph Perkins, who was at that time a trustee of Western Reserve College, of which the medical college in Cleveland was a department.

The next catalogue of the Medical Department of Western Reserve College published after this incorporation was printed in February 1867. It states: "The patients of the City Hospital —averaging from 150 to 200—are exclusively at the control of this Faculty which afford a great variety of interesting and instructive cases." Hospital statistics then were on the basis of the number of patients in a hospital in a calendar year rather than on the number of patients in a hospital at one time.

The use of the present tense in this statement in the catalogue has been interpreted to mean that the hospital was in operation in February 1867. However, extensive search has failed to reveal any activity of the Board of Trustees of the Cleveland City Hospital for several years after the Board was incorporated. No evidence has been found of operation of any hospital in Cleveland before July 1868 except the City Infirmary, the Marine Hospital, and the Hospital of St. Vincent de Paul. Therefore it is my opinion that the future tense should have been used in the statement in the catalogue, at least until July 1868, and that this statement represents wishful thinking only.

The statement continued to appear in the catalogue through the one printed in February 1872.

In April 1868 the name Cleveland City Hospital was used again in the organization of the Cleveland City Hospital and Woman's Homeopathic Medical College, which was incorporated. A homeopathic medical college for women had been organized in the fall of 1867 and its faculty had given a course of instruction in the following months. None of the trustees of the corporation of April 1868 was identical with any of the trustees of the corporation of May 1866.

On April 21, 1868 the Wilson Street Hospital Association was organized at a public meeting.[22] It was not incorporated. Of this association Mr. Hinman B. Hurlbut was president. There were ten trustees, five of them men and five women.[23]

One half of these trustees were supporters of the regular system of medical practice and the other half were supporters of homeopathy. Also six members of a medical staff were appointed, three of them regular physicians and three of them homeopathic physicians.[24]

The trustees announced that both regular and homeopathic medical practice would be carried on in the proposed hospital, and that women physicians would be admitted. The only women physicians in Cleveland at that time were homeopaths.

This was called a homeopathic hospital in communications in the newspapers. The statement was publicly denied by the trustees, who said that it was both a regular and a homeopathic hospital. Several communications in the newspapers from physicians advised against the attempt to mix regular medicine and homeopathy in the same hospital, and predicted that no amicable operation could ensue. Certain homeopathic physicians connected with a project to establish a hospital in connection with the Cleveland Homeopathic College for men were especially emphatic on this point.

Money was raised by selling "shares," a favorite method at that time in establishing any philanthropy. On June 1, 1868 a large frame dwelling house at 83 Wilson Street was purchased for $9,000.[25] It was deeded to the Cleveland City Hospital, of which the Wilson Street Hospital Association was a subsidiary.

This house stood on a lot of over two thirds of an acre, permitting future building expansion. The building was on the north side of Wilson Street and faced the small Clinton Park. The rear of the building overlooked Lake Erie, the shore of which was only a few hundred feet distant. Inaccurate statements through the years have arisen from confusion of Wilson Street and Willson Avenue. The latter is now East Fifty-fifth Street. Wilson Street was north of St. Clair Avenue in the region of the present East Twelfth Street. It was later renamed Davenport Street to avoid confusion with Willson Avenue.

The women members of the Board of Trustees held a fair to raise money for furniture and equipment. The first patients were received in the hospital on July 23, 1868. In the first year of operation one hundred patients entered.[26]

The prediction of the immiscibility of regular and homeopathic physicians in the same institution was fulfilled and after a notice of thirty days the hospital was closed on September 1, 1869.

Mr. Hurlbut, the president, notified the sympathizers with homeopathy that he would either "buy or sell." He offered to secure all the shares owned by the supporters of regular medicine and sell them to the homeopathic sympathizers, or to buy all the shares owned by the supporters of homeopathy. The homeopaths decided to sell, a decision probably influenced by the fact that the Cleveland Homeopathic Protestant Hospital had been in operation in the former buildings of the Cleveland University since October 1, 1868 and at this time was appealing for financial support. Mr. Hurlbut bought these shares and cancelled them. The homeopathic physicians and the homeopathic supporters on the Board of Trustees withdrew. In November 1869 notice was given that homeopaths would no longer be permitted to practice in the hospital, and the institution then became a purely regular hospital under the professional direction of Dr. Henry K. Cushing and Dr. Alleyne Maynard. Both had been on the staff since July 1868. Both were regular physicians but neither was a member of a medical faculty at this time.

The deed to the property, which had been signed on June 1,

1868, was recorded early in October 1869, and sometime later in this month the hospital was reopened. A newspaper item states: "The Cleveland City Hospital at 83 Wilson Street, having changed hands and been thoroughly reorganized, is again open."[27]

Dr. David H. Beckwith, one of the homeopathic members of the staff in 1868-69, in connection with an article on a related subject written thirty-five years later, described the events of this period.[28] At the time of writing this he was nearly eighty years of age and must have relied upon recollection rather than records. He confused different events and gave erroneous dates as shown by contemporary records.

I have been unable to find evidence as to whether the trustees in sympathy with regular medicine retired at the same time as the homeopathic supporters. However, during the next eighteen months Mr. Hurlbut personally carried the expense of the institution except for the small amount received from private rooms. This led to references to "his hospital," and diminution of public contributions. Therefore, early in May 1870 the institution came under the direction of seven trustees of the Cleveland City Hospital corporation. This body, formed on May 21, 1866, appears to have been little active in the intervening four years.[29] Mr. Hurlbut was made President of the corporation and six women were made a Board of Managers.

At this time the medical staff of two men was replaced by a staff of six, five of whom were members of the faculty of the Medical Department of Western Reserve College.[30] The statement printed in the catalogue of the medical college for three years came to be realized. Probably the first effective teaching of medical students at this hospital was in the session of 1870-71.

The original capacity of the hospital was twenty beds, which was increased to thirty beds by a frame addition built at a date not determined. This addition is shown in a photograph of 1872. The number of patients was somewhat over one hundred each year. Approximately half of the patients were charity patients.

The earliest pamphlet report available bears on the title page: "Second Annual Report of Cleveland City Hospital known as

Wilson Street Hospital." This report covered nine months of 1871 and was printed in January 1872. The caption attempted to diminish the confusion of names. Cleveland City Hospital, City Hospital, and Wilson Street Hospital were used synonymously from 1868 to 1875.

The work of the hospital increased. One hundred and sixty-three patients were admitted in 1873. There was need of more room to be secured either by additions to the building occupied or by erection of a new building. On July 16, 1874 Mr. Leonard Case gave to the Cleveland City Hospital an area of several acres as a site for a new hospital.[31] This plot extended from the right of way of the present New York Central Railroad to the shore of the lake and was immediately east of Marquette Street. This area is just west of the present East Fifty-fifth Street.

The announcement of the medical college was published a few weeks later. It stated that the "building of a new hospital is now in progress," and carried on the back cover a picture of the hospital, which shows a brick structure consisting of a central administration building of four stories and three connecting ward buildings of two stories. I estimate from this picture that the proposed buildings would have had a floor area sufficient for about 150 beds. There is no record that construction was begun. Change of plans came from another chain of events.

Immediately after the close of the Civil War a group in Congress proposed that the federal government should close many of its marine hospitals. This public agitation was probably related to the suggestion already cited in a newspaper in Cleveland in 1866 that the United States Marine Hospital in Cleveland should be purchased privately and converted into a general hospital.

The proposals in Congress continued, and in 1875 the city council of Cleveland asked the congressman from this district to secure the lease of the United States Marine Hospital in Cleveland for ninety-nine years at one dollar per year, the building to be used for a municipal general hospital. The Secretary of the Treasury refused the offer. However, on September 21,

1875 he signed a lease with the Cleveland City Hospital for twenty years from October 1, 1875 at a rental of one dollar a year, with the provision that sailors should be given care, except medical care provided by the United States Marine Surgeon, at the rate of fifty-four cents a day. The number of sailors to receive care was limited by agreement.

Necessity of some repairs delayed opening for patients until December 8, 1875.[32] On this date the Wilson Street Hospital ceased to exist and the name was no longer used. The number of patients steadily increased. Interval statistics are 240 patients in 1875, 438 in 1880, 583 in 1886, 783 in 1888, and 1,035 in 1890. The proportion of sailors was usually a little less than half in each year. Also during a few years this hospital received patients assigned by city officials at an agreed rate per day. These were mostly employees of the city injured in accidents and indigents from the City Infirmary afflicted with ailments that could not be treated there, usually requiring surgical attention.

Many improvements were made during the occupancy of the federal building, paid for by private donations, several of them by Mr. Hurlbut. A contagious ward was added, and then a ward for children, which was soon increased by the construction of a cottage for children on the grounds. In 1880 a pathology building and a teaching amphitheater were constructed.

The Cleveland City Hospital was the only hospital available to the faculty of the Medical Department of Western Reserve College for teaching until 1878, when partial privileges were secured at Charity Hospital, and in return the medical faculty of the University of Wooster was given partial privileges in the Cleveland City Hospital, the visiting staff being equally divided between men from the two medical colleges, an arrangement continued until the union of the two medical faculties in 1881.

During the three years from 1884 to 1887, while the new medical school building was under construction, a large part of the instruction to the Western Reserve medical students was given at the Cleveland City Hospital, and a temporary building was erected on its grounds to provide for the teaching of anatomy.

When the municipality in enlarging its infirmary adopted the name of City Hospital, confusion of the two institutions became likely, and in March 1889 by order of the court the name of the corporation of Cleveland City Hospital was changed to Lakeside Hospital. It was still the same organization that had its birth on May 10, 1866.

The building was not adequate for the hospital, and in the late 'eighties plans were begun for erection of a new hospital building for occupancy when the lease should expire October 1, 1895. Although the corporation owned an adequate site given by Mr. Leonard Case in 1874, this was considered too remote, so it was sold and a site of over four acres purchased immediately east of the United States Marine Hospital on the north side of Lake Street—now Lakeside Avenue. The purchase was made in 1889, when payment was partially made. The raising of the balance of the purchase price of $69,000 and some unexpired leases delayed building operations.

A committee of the trustees visited three eastern cities in 1891 to inspect hospitals. An architect was engaged in 1893. A committee again visited eight or more eastern and western cities in 1895 and instructed the architect to draw plans for a group of twelve buildings on the pavilion plan.

Delay arose because of the business depression of the early 'nineties. Subscriptions for the cost of the new hospital were difficult to secure, and when made some donors had to ask for postponement of the date of payment beyond the expected date. The president of the Board of Trustees stated in January 1895 that $100,000 more must be in hand before building operations could begun.

The catalogue of the medical school published in January 1895 gave assurance that the new hospital buildings would be erected in the summer of 1895 and would be ready for use for teaching with the opening of the session of 1895-96. However, ground was not broken until shortly before July 1, 1895.[33] The federal government extended the lease on the building of the United States Marine Hospital for six months. This extension expired on April 1, 1896, when Lakeside Hospital vacated

the premises, and in May 1896 the government reopened its hospital.

Therefore Lakeside Hospital suspended operation on April 1, 1896. Some patients who could not be discharged were transferred to Charity Hospital, where members of the staff of Lakeside Hospital had some space for a few months. The staff was maintained but had no facilities for patients for more than a year.

A delay in addition to that arising from lack of money arose. The same bed of quicksand that had delayed construction of the adjacent Marine Hospital forty years earlier was encountered, and not only delayed original construction but brought difficulty in later years when some of the hospital buildings began to slide down the slope, and extensive expense and difficult engineering operations were required to prevent collapse.

The medical school catalogue printed in January 1897 stated that the new hospital would be opened in the spring of 1897. This hope was not fulfilled. The hospital was dedicated on January 12, 1898 and the first patients were received on January 17. The activities of the hospital had been suspended for more than twenty-one months.

The number of buildings announced at the time of dedication was eight. Another statement records eleven buildings, which figure probably included the corridors connecting the buildings. Additional buildings were erected later, partly for wards but largerly for service purposes. The capacity announced at the time of dedication was 250 beds. This was nearly four times the capacity of the institution while in the federal building. Lakeside Hospital became the largest teaching field of the medical school during the next twelve years. Moreover, it was near the medical school building, while other hospitals used for teaching were distant from one to four miles.

The records of the Board of Trustees at the time of dedication show that the cost of land and buildings had been $575,000. Expenditures of nearly $500,000 were later made for more land and additional buildings. The land and buildings were sold in 1926, nearly thirty years later, for $1,500,000.

In April 1895, six months before the lease of the federal building was due to expire, the medical faculty petitioned the Board of Trustees of the university "to proceed at once to create a hospital which shall be under the exclusive control of the university for the benefit of the medical department." This led to a contract between the trustees of Lakeside Hospital and the trustees of the university which secured to the university the nomination of the staff of the hospital and exclusive control of its teaching privileges, for which an annual sum of a few hundred dollars was paid. The relation was more intimate than a mere contract implied. Several individuals were leaders in both boards of trustees and zealous for the welfare of both institutions. Essentially Lakeside Hospital was a university hospital after 1898.

Mention has previously been made that the present University Hospitals consists of four units. The varied history of the oldest unit has been described. Two projects for detached hospitals, each in a limited field of medicine, developed much later and will presently be described.

The episode which crystallized these three organizations into the present University Hospitals came from a source unrelated to medicine. The railroads entering the city had their passenger terminals at four different locations. In 1914 they united in a proposal to build a single union passenger terminal of all railroads. One of the sites discussed would have included the land occupied by Lakeside Hospital. If this proposal should be consummated and the hospital site selected, Lakeside Hospital would have to move. In consideration of a new site for Lakeside Hospital, decision was reached to build it, as well as a babies hospital, a maternity hospital, and a new medical school building on a common plot of ground, and the term "medical center" began to be used.

The project of a union passenger railroad terminal was postponed when the first World War began, but the ferment for a medical center had been started and continued until it was finally consummated seventeen years later.

A plot of land near the university campus was secured, and

architects were engaged to plan the medical center. The first unit to be erected was the medical school building, begun in 1922 and occupied in 1924. Before this was complete, buildings were begun for the Babies and Childrens Hospital and the Maternity Hospital, neither of which had acceptable quarters for operation. When these were occupied in 1925, a holding corporation was organized under the title of University Hospitals Incorporated. It was an operating organization made up of representatives from the three different boards of trustees.

In 1928 a building was completed in a suburb for a younger hospital project, the Rainbow Hospital for Crippled and Convalescent Children. This came into the holding corporation of University Hospitals. In 1940 the holding corporation was succeeded by a single corporation which absorbed the boards of trustees of three of the units of the University Hospitals. The Rainbow Hospital continued as a separate corporation and is only an affiliated member of University Hospitals and is therefore not described, although some teaching of orthopedics to medical students is done there.

There remained the provisions for the largest and most expensive unit of the medical center, the general hospital. This was held back until the subscribers to the cost of the two smaller units had had opportunity to complete the payments of their subscriptions. The original plan was to solicit the cost of the general hospital in 1926, but this was postponed until 1927, when a campaign for six million dollars for this purpose was over-subscribed.

However, because the payment of these subscriptions extended over a period of three years, building operations were not immediately begun. Ground was broken on October 14, 1928. The original plan was to have the general hospital face on Euclid Avenue, as shown in an architect's sketch published in the medical school catalogue for 1922-23. This plan was changed and the general hospital faces westerly on Adelbert Road.

Inasmuch as the present location is four miles from the shore of Lake Erie, the former name of Lakeside Hospital was hardly

appropriate in the new location. Nevertheless, the old name is still retained.

The new Lakeside Hospital was opened in February 1931 with 316 beds. It was designed as a teaching hospital and therefore the proportion of ward beds to private beds is larger than is usual in general hospitals. The hospital contains a large teaching dispensary for ambulatory patients, as well as extensive service rooms and laboratories. It also has private rooms for members of the teaching staff of the medical school in the several clinical departments.

The capacity of the general hospital has been increased to 405 beds. The Babies and Childrens Hospital has 147 beds, the Maternity Hospital 188 beds, and the Rainbow Hospital for Crippled and Convalescent Children, in a suburb five miles distant, has 100 beds. This makes a total of 832 beds in the four units of University Hospitals.

The three successive locations of what is now the general hospital of University Hospitals were within a distance of a quarter of a mile of each other. The location on Wilson Street was occupied seven years, that in the rented federal building twenty and one-half years, and the location on Lakeside Avenue thirty-three years. This makes a total of sixty-three years from 1866 to 1931, in neighboring locations. This includes a period of twenty-one months when the hospital was not operating, between the termination of its lease of the federal building and occupancy of the new set of buildings. The hospital has been in its new location over twelve years. The distance between the old site and the new location is over four miles.

In October 1926, more than four years before Lakeside Hospital was moved to its new location, an agreement of sale of the lands and buildings was made with an individual who immediately transferred it to the Pennsylvania Railroad Company, which soon became the owner but did not take possession until after the hospital was moved in February 1931. The price received was $1,500,000. The buildings were demolished beginning in March 1931.

In these seventy-seven years since the organization of the

Cleveland City Hospital Association in May 1866, a vast number of men and women have contributed to the service of the institution. Members of the laity gave generously for buildings, endowment, and operating expenses, and many of them gave with equal generosity much of their time and thought in overseeing the operation of the institution. Physicians have rendered professional service to many thousands of patients. Nurses have watched over these patients and carried out the directions of the physicians day and night, and many non-professional employees, little seen by either patients or visitors, have contributed to the successful operation of the hospital and to the comfort of patients. The aggregate of these contributions should not be forgotten by those connected with the hospital in its present quarters, more extensive and far better than those occupied in earlier years by this venerable institution.

Maternity Hospital

The history of this institution goes back over fifty years but without connection with the Medical Department of Western Reserve University in the early years. In 1891 the Maternity Home of Cleveland Association opened a small hospital in an old residence at 58 Huron Street. The association was incorporated in 1892 as the Maternity Hospital of Cleveland. The hospital was moved in October 1898 to 134 East Prospect Street, now Carnegie Avenue, at the corner of the present East Sixty-Fifth Street. It was again moved in December 1906 to 2364 East Fifty-fifth Street, where it was located until May 1912, when a building at 3765 Cedar Avenue was occupied. The capacity while on Carnegie Avenue was six beds, increased to twelve beds when removed to Willson Avenue, and developed to about sixty beds while on Cedar Avenue.

It was supported by private subscriptions and was entirely independent of any other hospital organization in the city. Provision was made for both charity patients and pay patients. A senior medical student lived in the hospital under the title of resident. Since 1913 the resident has been a graduate physician and in that service men are given graduate instruction

in obstetrics. Over fifty men have remained in this service during three years and have qualified for the certificate of the American Board of Obstetrics and Gynecology.

Another obstetrical activity began in 1906. Dr. Arthur H. Bill, then Assistant in Obstetrics in the medical school, organized a service of obstetrical deliveries in the homes of charity patients. The first delivery was made in January 1907, and in that year sixty deliveries were made; the number increased to 350 in 1909. In some later years nearly 4,000 deliveries have been made in this service in a single calendar year.

This service had no headquarters, the telephone calls coming to the house of Dr. Bill. In 1909 the Medical Department of Western Reserve University rented a house at 2509 East Thirty-fifth Street, which was fitted for living quarters for medical students. A small group of students was assigned to this residence for a period of four weeks and answered the calls for obstetrical service.

This was the first headquarters, and at this time became known as the Maternity Dispensary of Lakeside Hospital and Western Reserve University. An informal working agreement existed between this dispensary service and the Maternity Hospital of Cleveland. In 1913 this hospital became the headquarters of the outpatient service. In 1917, a contract was made between these two organizations and the name changed to the Outpatient Department of Maternity Hospital and Western Reserve University. This dispensary has now been in operation on East Thirty-fifth Street for thirty-five years, and in that time 100,000 deliveries have been made in the homes of patients and in the hospitals. Eight prenatal clinics located in various parts of the city were maintained in connection with the outpatient service.

In the beginning each senior student was required to attend four deliveries. This number was increased and for the past thirty years every medical student has made at least twelve deliveries before graduation. Many students have greatly exceeded this number. Students also observe deliveries, both in the hospital and in the outpatient service. The total of deliveries

made, plus those observed, has exceeded one hundred for a considerable number of students before graduation. The amount of practical obstetrics for students of the School of Medicine of Western Reserve University exceeds the facilities of other medical schools of the country, except for a very few.

The students who make deliveries are accompanied by a graduate and licensed physician who is a member of the teaching staff of the medical school. In connection with the outpatient department a service of visiting nurses is maintained. These nurses visit pregnant women, are present at the delivery, and also visit them after delivery.

The need of a maternity hospital of adequate size and equipment was appreciated as the work increased. Plans were considered for erecting a building in some location separate from that of any other hospital. The discussions of 1914 brought decision to join in the medical center. Development of the plan was inhibited by the First World War and for a few years after the close of the war.

In the spring of 1923 a joint campaign was carried through to raise money to build the Maternity Hospital and the Babies and Childrens Hospital, both to be located in the medical center on Adelbert Road. Ground was broken early in the fall of 1923. The new hospital was dedicated on October 28, 1925, and the first patients were received early in December. At this time the hospital on Cedar Avenue was closed.

The new building cost about $1,500,000. It is of steel and concrete construction faced with buff brick, seven stories in height. It contains 160 beds for adults and 110 beds for newborn infants. In 1927 the departments of obstetrics and of gynecology in the medical school were combined, and since that year one fourth of this hospital has been used for gynecological cases.

In 1936 the building was named Macdonald House in honor of a woman who had long been superintendent of the Maternity Hospital, but the name of the organization remains as the Maternity Hospital of the University Hospitals.

The hospital has charity wards and private rooms for pay

LAKESIDE HOSPITAL FROM 1898 TO 1931

patients. In the hospital the medical students receive instruction in obstetrics and gynecology in provided class rooms. The students of the school for nursing also receive both didactic and practical instruction in these two subjects in this building.

The Babies and Childrens Hospital

The Cleveland City Hospital had a ward for children in 1876, a year after it occupied the building of the United States Marine Hospital. Dr. Hunter H. Powell, Professor of Obstetrics and Diseases of Children in the medical school, was appointed on the staff in 1879. A cottage for hospitalization of children was erected on the grounds in 1889; it was the first separate building in Cleveland for medical care of children. Dr. Edward F. Cushing, then Lecturer in Pediatrics in the medical school, was appointed on the staff in 1894.

When the new buildings of Lakeside Hospital were occupied in January 1898 they contained a ward for children. A ward for contagious diseases was later erected.

When the dispensary was opened in the medical college building in January 1887 one of the eight divisions was that of diseases of children, under charge of Dr. Samuel W. Kelley until he resigned in September 1893, when this division was combined with that of obstetrics under the charge of Dr. Hunter H. Powell with Dr. Frank S. Clark as assistant. The division of diseases of children was separated from obstetrics in 1895 and placed in charge of Dr. Edward F. Cushing, Dr. Clark continuing as assistant. When the dispensary was moved from the medical school building to the buildings of the new Lakeside Hospital in January 1898, Dr. Cushing continued in charge.

In 1902 a philanthropic Milk Fund Association was organized to provide milk of high grade as food for infants of indigent families. Dr. John H. Lowman, Professor of Clinical Medicine in the medical college, visualized a combination of the service for providing milk for infants with a service for medical care of these infants. Under his direction a Dispensary for Infants was opened in the emergency district near the Hay market in 1906.

Dr. Edward F. Cushing, then Professor of Pediatrics in the medical college and in charge of the ward for children at Lakeside Hospital, originated a plan for more extensive service in pediatrics with the building of a separate and independent hospital. The Infants Clinic and Hospital of Cleveland was organized December 19, 1906 and incorporated February 7, 1907 as the Babies and Childrens Hospital and Dispensary. A plot of ground was bought on East Thirty-fifth Street large enough for a group of buildings including a dispensary, a hospital, and a home for nurses.

Dr. Henry J. Gerstenberger, a graduate of the medical school in 1903, had recently returned from two and a half years of study in Europe, where he had extensive experience in the newly developed infant welfare work. He was placed in charge of the dispensary when it opened in July 1907 in a residence on the property which had been purchased, and in September he was appointed on the teaching staff of the medical school with the title of Assistant in Diseases of Children and Physician-in-charge of the Babies Dispensary. The Visiting Nurse Association cooperated in this work. The attendance in the first year of operation was nearly two thousand, and over four thousand visits were made in the homes. The dispensary has been in continuous operation since 1907 with greatly increased service. In 1925 it became attached to the out-patient service of City Hospital. It has been used for teaching students for nearly forty years.

In 1910 an architect drew plans for a hospital of fifty beds and for a dispensary building. The latter was immediately built on East Thirty-fifth Street and occupied in February 1911. The death of Dr. Cushing in March 1911 delayed action on building of a hospital. Various modifications of plans were made, but no building activity developed beyond securing some subscriptions toward the cost of a hospital.

When the erection of the new medical school building was well along a joint campaign for funds to erect the Babies and Childrens Hospital and the Maternity Hospital was carried out in the spring of 1923. Ground was broken in the early fall of

1923. The new Babies and Childrens Hospital was dedicated October 28, 1925 and the first patients were received on December 3 following. The cost was approximately $1,500,000.

The building is of steel and concrete construction faced with buff brick, and is seven stories in height. The capacity is 110 beds in wards and thirty-seven beds for private patients in rooms for one to three beds, a total of 147 beds. One floor is devoted to a library and laboratories to provide facilities for the research that has been carried on since the building was occupied. Its equipment is extensive and modern in every respect. It is used for teaching medical students and for didactic and practical instruction in pediatrics to the students of the school for nurses. Dr. Gerstenberger has been for thirty-seven years the effective leader in the development of the present facilities for medical and surgical care of babies and children.

St. Alexis Hospital

This institution, located several miles from the medical school building, was founded in 1884 by the Catholic order of the Sisters of St. Francis. A large building was erected in 1903 with a capacity of nearly 300 beds. This hospital was used for clinical teaching by the School of Medicine of Western Reserve University during a few years, although not extensively. Its use was restricted to that part of the medical college session when the medical faculty did not control the teaching material at City Hospital. The consolidation with the Medical Department of Ohio Wesleyan University in 1910 brought control of teaching material at City Hospital throughout the session, and St. Alexis Hospital was not used after that time.

At the beginning of the chapter I limited the number of hospitals that were to be mentioned. In several other hospitals there has been a small amount of teaching, in no case an extensive part of the curriculum.

Many hospitals have arisen in Cleveland; some have disappeared. They have been variously organized and supported by the federal government, by the state, by the municipality, by church denominations, by racial groups, by groups of physicians,

by business corporations, and by groups of men and women with benevolent aspirations.

Hospitals are familiar in 1943 and it is a little difficult to realize that up to 1851, ninety-two years ago, the only institution in Cleveland that had any resemblance to a hospital was an almshouse with about thirty inmates.

In 1943 there were about thirty hospitals in Cleveland, not including its immediately adjacent surburbs, with a total capacity of over 8,000 beds, as listed by the American Medical Association. This is a far cry from that log structure of 1813 overlooking the lake, with less than thirty "well-strawed" bunks attached to the walls by wooden pegs.

The School for Nursing

Lakeside Hospital organized a training school for nurses in January 1898, with a course of three years. The training was largely in the practical care of patients. However, some didactic instruction with laboratory demonstrations was given by men on the staff of the hospital or on the teaching staff of the medical school.

A department of nursing was established in the undergraduate College for Women of the university in 1921. This was replaced in 1923 by a school for nursing as a definite department of the university. This was made possible by receipt of an endowment of $500,000, increased in 1928 to $1,500,000 given by Mrs. Frances Payne Bolton, a citizen of Cleveland. The school is named in her honor, The Frances Payne Bolton School of Nursing. A high type school for nursing was organized, with graduation from a college of arts required for admission and a progressive curriculum designed to prepare young women for responsible positions in nursing education and administration. In 1927 Mrs. Bolton gave $750,000 for erection of a large residence for the students of nursing, adjacent to the general hospital. The cornerstone was laid in June 1929. Facilities for administration, library, and systematic instruction in what is an outstanding educational institution in this professional field are provided in two former dwelling houses on Adelbert Road,

one of them enlarged by a brick addition. Both undergraduate and graduate instruction are maintained.

The medical center now contains the medical school, the hospitals, the school for nursing, the closely associated and adjacent schools of dentistry and pharmacy, and the Cleveland Medical Library. The total cost of buildings for all these activities has been over twenty million dollars.

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XII

STUDENT ACTIVITIES

Conditions of medical education in the middle of the nineteenth century did not invite extracurricular activities of medical students. The short sessions, usually of sixteen weeks, did not give time for students to get well enough acquainted to organize societies. The sessions did not begin until after the state and national elections; this prevented organization of the political clubs, prevalent in colleges of arts. Athletics had not developed. Medical students roomed in private homes instead of living in dormitories. Moreover, few medical students attended more than two sessions and often these were not consecutive; many attended only one session. The result was that of the enrollment in any session a majority had not been in the institution in the previous session.

Conditions in colleges of arts were far different. In these the session extended through forty weeks, each student attended four sessions before he was graduated; the students lived in dormitories and were usually rigidly restricted to the campus. Colleges of arts were usually in small towns, offering little opportunity for diversion compared to that available for students in the medical colleges in cities.

All of these conditions brought much more student activity in colleges of arts than in medical colleges. The most prominent feature was the literary societies, which met weekly for debate and other practice in oral exposition, a need of men who planned to enter the ministry or law. Physicians had less need of being good public speakers.

The Cleveland Academy of Natural Science

The first opportunity for students of the Medical Department of Western Reserve College in extracurricular activity was in the Cleveland Academy of Natural Science, founded in 1845 "in connection with the medical school" by Professor Jared P.

Kirtland. Membership included members of the medical faculty, local citizens engaged in other professions and in business, and such medical students as cared to pay a small membership fee. This organization held its meetings in the medical college building, where it maintained a large museum of natural history for more than forty years. This museum was open to medical students and to the public. The programs included essays on various phases of natural history, but largely excluded medical subjects. Although the papers presented were largely by members who were not medical students, the programs show some by students, in all cases by older students who had already been in medical practice. Natural history was a popular diversion of physicians of that day, especially of country physicians.

The Cleveland Medical Lyceum

Modifications of the literary societies of the colleges of arts arose in many medical colleges. These were not debating societies but organizations for discussion of medical subjects. Many examples could be cited, some arising in the early 'twenties. Soon after the Willoughby Medical College was founded in 1834, such a society was organized among its students. The name of Rush Medical Society was adopted in honor of Dr. Benjamin Rush, at that time the most famous of former American physicians. This society was incorporated by a special act of the state legislature.

Names of other physicians, some of them European, were used in naming these student medical societies of various medical colleges. They sometimes adopted the name of an especially venerated professor of the institution in which the society arose.

A society of this type was organized among the students of the Medical Department of Western Reserve College on January 12, 1846. The leader in its formation was Dr. Jacob Delamater, who had been a member of a similar society in another medical college. Members of the medical faculty were made honorary members. The active members were medical students who were elected by ballot and received an engraved certificate

of membership. Election was considered an honor because the society was an organization of a few selected students. The president was usually one of the professors; students held all the other offices. The name adopted was the Cleveland Medical Lyceum.

The word "lyceum" in its Greek form was used in Athens to designate the outdoor wrestling ground with shaded walks, and was named from a neighboring temple. Here Aristotle taught philosophy as he walked with his followers. Later the word was used for a school that prepared students to enter a university, and is still so used in France. The word in America was applied to a society for literary improvement and study. Many lyceums were organized in towns and cities in the middle of the nineteenth century. Often these sponsored an annual public lecture course.

The word "medical" was inserted into the name of this society of medical students to distinguish it from the Cleveland Lyceum conducted by laymen. The society met weekly during the session of the medical college. Some of the presentations were by members of the faculty, though most were by students. Its meetings offered a forum for senior medical students to present the theses which they were required to write before receiving a medical degree. Discussion followed the presentation of papers, all of which were on subjects related to medicine.

This student society was active for fifteen years until the beginning of the Civil War. I have been unable to find any record of activity after 1861 until a revival was attempted in 1874, which continued for only one year. Another attempt at revival was made in the 'eighties, also short lived. In November 1892 the students organized the Western Reserve Medical Society, which was active for three years.

A group of former students of the medical college who were practicing in northern Ohio and who had been members of either the Cleveland Academy of Natural Science or of the Cleveland Medical Lyceum, or of both, organized a society in 1867 which was called the Delamater Society to honor Dr. John Delamater, lately deceased. This society met four times

a year at the county seats of various counties, usually on the day before or the day after a meeting of a county medical society, from which it was distinct. The programs were largely of a medical nature but contained some papers on natural science. Membership was considered an honor. In the first published volume of autobiographical sketches of prominent American physicians many sketches mention membership in the Delamater Society as one of the honors conferred upon the writer, often placing it before offices in medical societies or elections to civil offices.[1] The Delamater Society continued active for about twenty years. Although it was not a student society its origin was clearly implemented by the student societies of the 'forties and 'fifties in the Medical Department of Western Reserve College.

A society to discuss medical problems, its membership including junior and senior medical students, internes, and younger members of the teaching staff, was organized in 1906 and given the name of the Allen Society in honor of Dr. Dudley P. Allen, Professor of Surgery. The last mention of this Society is in the catalogue printed in March 1912. Dr. Allen had resigned in 1910.

The activity of the societies of the practicing profession in Cleveland, to the meetings of which medical students were welcomed, and the rise of medical fraternities inhibited efforts to conduct student medical societies in the medical school for twenty-five years.

The upper-classmen in 1938 organized a student medical society. In the choice of a name they followed the custom of the early nineteenth century and the precedent of the Delamater Society and the Allen Society. They chose a name to honor a revered former professor. The organization is called the Hamann Society, in honor of Dr. Carl A. Hamann, a professor for thirty-six years who had died in 1930.

This, like the Cleveland Medical Lyceum, is a society of selected students and therefore membership in it is considered an honor. Some members of the faculty have been similarly honored by election as honorary members. The active members

are elected at the beginning of the junior year and continue as graduate members after they are no longer students in the medical school. The society holds a meeting each month during the session. One of these is an annual meeting with a dinner and invited guests. An active member presents at each meeting a carefully prepared paper upon a medical subject. These papers are sometimes reviews of literature and progress in a limited field and at other times they are reports of research to which the member is related. Some of the papers pertain to the medical sciences, but more usually a clinical subject is presented. The members have all reached the clinical phase of the curriculum. This society offers an excellent forum for younger men to prepare for later active participation in the societies of the practicing professions.

The Hamann Society has many features of the Cleveland Medical Lyceum organized in 1846 in the medical school, and is in fact a direct successor, after several interruptions, of that early student medical society.

Student Publications

A student magazine was founded in the medical college and called *The Western Reserve Medical Journal.* Its first issue appeared December 15, 1892. Four issues were published in each session, then twenty-four weeks in length. Its board of editors included men from each class and also one from the dental department, then housed in the medical school building.

Each issue contained thirty-two pages. The contents included articles written by members of the faculty, by other officers of the university, and by senior medical students. An alumni department featured a sketch and portrait of some prominent alumnus in each issue. News notes were included, and some frivolities were allowed. Illustrations of buildings connected with the medical college and with the affiliated hospitals are scattered throughout the issues.

This journal was well edited and contained much interesting material. It merited continuation. However, the financial problem brought its demise. Subscriptions from alumni did not

meet expectations and the circulation was so small that the support from advertisements decreased. A faculty minute of November 21, 1895 carried a resolution "to discontinue after January 1, 1896 the publication of *The Western Reserve Medical Journal.*" Thus died the first and last student medical journal in this medical school, at the age of three years.

A few members of the teaching staff were on the editorial board of this student journal in its last year. They became members of the board of editors of *The Cleveland Medical Journal,* established in 1896 for medical practitioners. Therefore the student journal established in 1892 may be considered an early phase of the new journal, which continued to be published for many years but is now extinct.

An annual book was published by the junior class of the college of arts beginning in 1869 and has continued, with some short interruptions and some changes of name, for over seventy years. In 1896 a medical student was added to the board of editors of this annual book and a section of the book was devoted to the medical department of the university. This continued until 1916. After a suspension of eight years, the medical students again participated in the annual from 1924 to 1928. The medical students have taken no part in this publication during the last fifteen years.

A weekly publication was organized in the college of arts, and after the medical school came to be located adjacent to the university campus, at times one or more medical students were on its editorial board. This relation also has been discontinued. The complete survey shows that students of this medical school have taken little part in university student publications, a condition that is duplicated in most medical departments of universities.

Athletics

No record is found of any independent organization of athletics in this medical school, and participation in university athletics has been meager. The chief athletic activity in the college of arts after it moved to Cleveland in 1882 was baseball.

The session of the medical college until 1894 closed before the opening of the baseball season, and when the closing of the medical school was advanced, it came in the middle of the baseball season in May. Therefore medical students could not be members of the baseball team which continued to play until the middle of June. When the closing dates of the school terms of the college of arts and of the medical department became coincident in 1899, interest in baseball had much declined.

Football became a prominent sport in Western Reserve University in the early 'nineties and a few medical students participated. This increased after 1900. However, when an intercollegiate rule barred from team membership men who had already been graduated in arts, most of the medical students were eliminated, only those medical students who were seniors in absentia being eligible. The number of medical students engaging in football decreased and has practically disappeared during the last thirty years. A member of the medical class of 1908 was captain of the university football team in two successive years at the time when medical students were most active in this sport and before the intercollegiate rules barred most of them.

A few medical students have been members of the university glee club and of other musical organizations. This arose from individual talent and does not represent any considerable activity of medical students in such university student organizations.

Students' Cooperative Association

The introduction of laboratory instruction and the extension of the length of the course to four years in 1896 resulted in the buying of more books and laboratory supplies by students. It was desirable to secure uniformity in these supplies, which was not facilitated when students made their purchases in various retail stores of the city. Therefore the faculty offered a room free of rental to a student who would privately be an agent for selling these things to students.

This plan, begun before 1900, developed some difficulties; and in 1906, through the suggestion of a member of the faculty

who had used a cooperative store in another university, the students of the medical school organized a cooperative association. Each student paid a small annual fee to get capital. The students of each class elected members who formed a board of directors. The faculty appointed an adviser to this board. The board appointed one of the students as manager and he conducted the business. The medical school continued to furnish a room without rental. The profits on sales not only allowed one or two students to earn nearly all their expenses each year but also provided a rebate to members in proportion to the amount of their purchases.

When the new building was occupied it contained a room especially fitted for this association. This procedure, now in operation for nearly forty years, has proved satisfactory, with some modifications which experience has suggested.

The Fraternities

The most extensive student activity during the past forty years has been in the medical student fraternities. Secret student fraternities began in colleges of arts in 1826. Their extension was slow in the next twenty-five years. After the middle of the nineteenth century their number increased rapidly and displaced in student interest the formerly important literary societies in many colleges of arts before 1890. The first of these fraternities in the college of arts of the present Western Reserve University was founded in 1840. Fraternities, with support of the faculty, became prominent in the college of arts in the following forty years.[2]

a. Nu Sigma Nu

Secret student fraternities entered the professional schools in the final quarter of the nineteenth century. The first medical student fraternity was founded at the University of Michigan on March 2, 1883.[3] It followed the custom in colleges of arts of designating such organizations by the initial letters of Greek words, the words themselves being one of the major

secrets of the organization. The first medical fraternity is known as Nu Sigma Nu. It was local until 1889, when chapters in other medical colleges were added until at the end of ten years there were eight, all but one in medical colleges west of the Allegheny Mountains.[4] Other similar fraternities arose within a few years, but Nu Sigma Nu was the pioneer.

The impetus for a chapter of a fraternity in the Medical Department of Western Reserve University was coincident with the decision for advanced entrance requirements adopted January 31, 1898. A group of students sent a delegation in March 1898 to the annual convention of Nu Sigma Nu seeking a charter for a chapter. The request was denied at this time because of the unfortunate choice of the delegates sent.[5]

The attempt was renewed two years later and at a meeting of selected students two seniors, four juniors, seven sophomores, and two freshmen—fifteen in all—joined in a petition for a chapter of Nu Sigma Nu. They were supported in their petition by eleven members of the teaching staff, several of them professors. These twenty-six men became the charter members of the Sigma chapter of Nu Sigma Nu, which was installed April 4, 1900. This was the eighteenth chapter of the fraternity. It was the introduction of student fraternities in the School of Medicine of Western Reserve University.

The chapter rented its first chapter house in 1905. It has moved seven times in less than forty years. It initiated a total of 339 members up to March 16, 1932, in addition to the twenty-six charter members.[6] Since that date it has initiated 227 additional members to make a total of 592 members to November 1, 1943. A few members of the faculty have been elected as honorary members since the charter was granted.

The large numbers of members of the faculty among its charter members gave it a precedence that other fraternities found difficult to combat in soliciting members. New students in deciding among invitations to join one or another fraternity, assumed that faculty members would favor students who were fraternity brothers, an unwarranted assumption but convenient in soliciting new members.

b. Phi Rho Sigma

The founding of the first chapter of a fraternity in the institution was followed by another a year later. Phi Rho Sigma was founded October 31, 1890, at the Chicago Medical College, now the Northwestern University Medical School. In 1940 it had thirty-five active and eleven inactive chapters with a total of over 14,000 members.[7] A proposal to establish this fraternity in the Medical Department of Western Reserve University was initiated by four internes at Lakeside Hospital, three of them members of the chapter at the University of Michigan and one a member of the chapter at Rush Medical College. The leaders among the students included two seniors, one junior and two sophomores.

A charter was secured and Kappa chapter was installed in April 1901 with twenty-three charter members—eleven juniors, seven sophomores, and five freshmen. This was the tenth chapter of the fraternity.[8] One of the founders, Dr. Ralph W. Elliott, of the class of 1903, has been secretary-treasurer of the grand chapter since 1921. Therefore important phases of the national administration of this fraternity have long been in Cleveland. Four hundred and twenty-four members have been initiated into Kappa Chapter before November 1, 1943. This chapter has maintained a chapter house since 1905, and has occupied four different houses, the last two being owned by the chapter.

c. Alpha Kappa Kappa

The small number of students in the medical school from 1902 to 1908 did not invite the entrance of additional fraternities. Attendance showed a marked increase in 1908 and there was room for a third fraternity.

Alpha Kappa Kappa was founded at Dartmouth Medical College in September 1888. In 1940 it had forty-five active chapters located in twenty-four states, the District of Columbia, and Quebec. Eleven additional chapters are inactive. It has initiated over 17,000 members.[9] It is the third oldest of all American medical fraternities.[10] Only two other medical fraternities have more chapters and more members.

A member of the fraternity entered the Medical Department of Western Reserve University in 1909 in advanced standing and proceeded to organize a group of students to make application for a charter for a chapter. Following investigation by the national officers of the fraternity, a charter for Alpha Xi chapter was issued and the chapter was installed November 16, 1909. The ten charter members included one junior, seven sophomores and two freshmen. An additional freshman was initiated at the installation meeting. Alpha Xi chapter was immediately successful and took a place comparable to its two rival fraternities in the institution with chapters longer established. The total number initiated while students into this chapter before November 1, 1934 is 474. There are also some members who were elected after graduation and twelve honorary members elected before 1924, including eight members of the faculty. Seven members established the first chapter house in a rented apartment immediately after the chapter was installed and changed to another apartment a year later. The first rented chapter house was occupied in 1911. Several rented houses were occupied between 1911 and 1929; in 1929 the chapter bought its first chapter house, which was sold in 1940 and a larger house purchased nearer the medical school.

d. Phi Chi

This fraternity was founded at the University of Vermont in 1889. In 1940 it had sixty-five active and three inactive chapters, with a total of 22,700 members.[11] It is one of the oldest and the largest of the medical fraternities. Alpha Theta chapter, the eighteenth in age, was installed in the Medical Department of Ohio Wesleyan University in 1906. With the consolidation of the two medical institutions the chapter was transferred to the Medical Department of Western Reserve University in 1910, which is the year from which the fraternity dates in this institution, where the chapter was active for twenty-eight years. The last initiation was in February 1937; the chapter became inactive in 1938. From the founding in 1906 until 1938 a total of 231 members were initiated.

e. Phi Beta Phi

This medical fraternity was founded in 1891 at the Western Pennsylvania Medical College, now the University of Pittsburgh School of Medicine. Its twenty-first chapter was installed in the Medical Department of Ohio Wesleyan University in 1906, with the designation of Upsilon.[12] When that medical college was consolidated with the Medical Department of Western Reserve University in 1910 the chapter was transferred. It did not long survive in an institution that had four other fraternities and less than two hundred students. It initiated a total of about twenty members while in its original location but none after it was transferred. A chapter house was maintained during a few years. The chapter became inactive in 1911.

f. Phi Delta Epsilon

This medical fraternity was founded at Cornell University in 1904. Upsilon chapter was given a charter and installed in the School of Medicine of Western Reserve University in the fall of 1919. It was the twenty-fourth chapter of the fraternity. In 1940 the fraternity had fifty-four active and four inactive chapters, with a total of about 7,000 members.[13] The twelve charter members of Upsilon chapter included four juniors, six sophomores, and two freshmen. A total of approximately 140 men have been initiated into this chapter up to November 1, 1943. It has never maintained a chapter house.

g. Nu Sigma Phi

The readmission of women to the medical school in 1918 brought the first medical sorority in the institution in 1920. Nu Sigma Phi was organized March 15, 1898 at the Chicago College of Physicians and Surgeons, now the University of Illinois College of Medicine.[14] The name was derived from an abbreviated combination of the names of two fraternities for men, some members of which were helpful in organizing the medical sorority, namely Nu Sigma Nu and Phi Rho Sigma.[15] Seventeen chapters of this organization have been installed up

to the present time, of which five are inactive. The total number of women initiated in all chapters is somewhat over one thousand.

The eighth chapter—Theta—was installed at the School of Medicine of Western Reserve University on May 18, 1920. The charter members were two women physicians who were graduates of medical schools outside Cleveland, and four members of the first year class.

Two women who were registrars of the medical school were elected to honorary membership. Also seven wives of members of the medical faculty have been associated with the chapter under the designation of patronesses. One hundred women have been admitted to this medical school from 1919 to 1943, and sixty-five of these have been initiated into Nu Sigma Phi. The number of undergraduate members of the chapter has at no time been large enough to warrant maintenance of a chapter house.

When the accelerated program of the curriculum in the medical school began in June 1942, this chapter temporarily suspended activity. The last members were initiated in the winter of 1942.

h. Phi Lambda Gamma

This fraternity was founded at the University of Pennsylvania in 1907. In 1940 it had forty chapters. Alpha Gamma chapter was installed at the School of Medicine of Western Reserve University in 1926 as the twenty-seventh chapter.[16] The charter members included four juniors. The total number initiated while students is twenty-two. Activity of the chapter was suspended in 1935, and the chapter closed in 1937.

The members of the medical faculty have cooperated with the fraternities throughout their existence. Professors and others frequently accept invitations to speak at the fraternity houses on subjects related to medicine that are not included in the regular course of instruction.

The fraternities are especially helpful in two ways. The upper-classmen in each fraternity serve as mentors to the

younger members and guide them along a difficult and unfamiliar road during the early part of the curriculum. These upper-classmen also are ready at any time to confer with officers of the medical school concerning individual members of the fraternity and often give information that aids these officers in constructive decisions in difficult problems.

There is no dormitory system nor common dining hall in connection with the medical school. Three of the fraternities maintain chapter houses in which a considerable number of their members room and board. This affords desirable provision at reasonable cost for many medical students whose homes are not in Cleveland.

The Medical Honor Society

The first honorary or scholarship society in American higher education was Phi Beta Kappa, which was established as a local secret literary society in 1776 and became intercollegiate within a few years. I have elsewhere described its evolution into a scholarship society about 1840.[17] A branch of Phi Beta Kappa was established as a secret honorary literary society in the college of arts of the present Western Reserve University in 1847, and has now been active for nearly a century.[18]

Phi Beta Kappa was restricted to colleges of arts and sciences. The establishment of engineering and technological schools brought a desire for an honorary society in the physical and natural sciences, and Sigma Xi was founded in 1886. It did not include medical schools in its field because they were at that time devoted almost entirely to teaching the art of medicine, with little emphasis upon medical sciences or scholarship.

The revolution in medical education at the end of the nineteenth century caused more attention to be paid to the medical sciences and improved pedagogical methods; and scholarship began to develop in medical student bodies, giving room for an honorary society to reward the better medical students.

A group of a few students of the Chicago College of Physicians and Surgeons, now the University of Illinois College of Medicine, in the summer of 1902 organized a local honorary society.

They followed the precedent of other scholarship societies in using for their name the initial letters of three Greek words, not secret, and designated it as Alpha Omega Alpha. Branches were organized in two other medical schools in Chicago in December 1902 and early February 1903.

The chapter in the School of Medicine of Western Reserve University was organized later, in April 1903. It was the first outside Chicago and the fourth in age of all the chapters, which now total nearly fifty and are located in medical schools throughout the United States and Canada. Inasmuch as the chapter in Cleveland was the first in Ohio it is designated as the Alpha of Ohio.

The founders were five seniors, members of the class of 1903. They were Dr. Webb P. Chamberlain, Dr. Henry J. Gerstenberger, Dr. Homer H. Heath, Dr. Walter C. Hill, and Dr. John N. Sipher. They were assisted in the organization by Dr. William T. Howard, Jr., of the faculty. He was elected an honorary member and is counted as a charter member of the chapter.[19]

Medical students are elected in their senior year primarily upon the record they have made in the studies of the medical course. A small and definite fraction of each class is elected. This quota is governed by regulations of the national organization of the society. Also these regulations permit election of a sharply limited number of honorary members. Under this permission a few professors have received honorary membership.

Students are elected in some medical schools at the end of their third year. However, in this institution election has been postponed, with the exception of four members in two different years widely separated, until the records for the entire four years of the medical course are available.

The total number of students elected from classes of 1903 to 1943 inclusive, including the five members of the class of 1903 who were charter members, is 268. Ten honorary members have been elected, one of whom was a charter member.

The chapter maintains two activities. It sponsors an annual Alpha Omega Alpha Lecture by some prominent man in medicine on a subject usually devoted to recent research in medicine.

The list of past lecturers includes many prominent American physicians and several Europeans. This lecture is public, open especially to all medical students and to all local members of the medical profession.

The second activity is the offering of monetary prizes for dissertations on some medical subject involving research by the author. This is open to all students of the school and to recent graduates whether members of the society or not. The support of this effort comes from the income of an endowment solicited from the members many years ago and held by the university as a trust for this purpose.

Members of this chapter have been active as officers and as members of committees in the national organization of Alpha Omega Alpha, and the chapter in Cleveland is regarded as one of the more efficient chapters of the society.

Election to Alpha Omega Alpha is the major recognition of student scholarship in this institution. In addition a few medical students are elected to the university chapter of Sigma Xi. Annual endowed prizes are offered in two subjects for accomplishment by students in those subjects, and one endowed scholarship is offered in the senior year, awarded on the basis of scholarship attainment.

Although the activities of medical students are far fewer than those of students in an undergraduate college and are more restricted because of the heavier study load of medical students, they have been brought into an orderly condition in which rarely any disciplinary measures are necessary. The medical student, being already a college graduate and older than students in colleges of arts, needs no rules to guide his conduct.

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XIII

RIVAL REGULAR MEDICAL COLLEGES

THE THREE local rival regular medical colleges that existed in Cleveland in the forty-six years from 1864 to 1910 constituted a series. Each institution replaced another with use of the same building and equipment and, in large part, the teachers of its predecessor. However, because each of these institutions had a different name and operated under a different corporation, the three are considered individually.

Rival regular medical colleges existed prior to 1864 in Baltimore, Charleston, Chicago, Cincinnati, Louisville, Philadelphia, New York, San Francisco, St. Louis, Washington, and even in the small village of Winchester, Virginia. No hint has been found of any attempt to establish a rival regular medical college in Cleveland before 1863.

The origin of a rival institution in the same city invariably came from dissension in the faculty of the older medical college. One or a few men of a faculty either withdrew or were dismissed and organized a rival institution both to retaliate and to advance personal fortunes, because occupancy of a medical professorship enhanced the reputation of a physician and brought to him both primary patients and those referred for consultation. A professor of surgery was usually the leader in organizing a new medical college.

CHARITY HOSPITAL MEDICAL COLLEGE (1864-1870)

The origin of this institution followed the common pattern. When Dr. Gustav Weber's connection with the Medical Department of Western Reserve College was terminated by its trustees in 1863, he immediately began preliminary steps toward establishing a rival medical college, through activity in founding St. Vincent de Paul's (Charity) Hospital already described in an earlier chapter.

Although vague rumors were abroad, intention to establish

a new medical college did not become public until a year after the dismissal of Dr. Weber. Announcement was made in the summer of 1864 that a new institution would open in October of that year under the name of Charity Hospital Medical College. The names of trustees and faculty were published.

This was the second time that the word "hospital" appeared in the official name of an American medical college, although the word had been used in names of medical colleges in Great Britain since the early part of the nineteenth century.

A new medical college was founded in New York City in 1861 under the name of Bellevue Hospital Medical College, so named because of close relation to Bellevue Hospital, built fifteen years earlier. In the latter part of the nineteenth century several newly established medical colleges inserted the word "hospital" into their official names to indicate that a large part of the instruction was done within hospital walls, a condition rarely found before the middle of the nineteenth century. The word "hospital" is not now found in the official name of any American medical college.

The new institution in Cleveland announced that it was patterned after Bellevue Hospital Medical College "to combine practical clinical teaching with the regular didactic lectures." The pattern was not closely followed.

The institution in Cleveland had no special charter enacted as a separate act of the legislature; many earlier educational institutions founded in Ohio, including Western Reserve College, had special charters. The rivals of the new institution charged that it had no charter. It was not chartered in the sense then familiar in Ohio because the revised state constitution of 1852 prohibited special legislative acts to incorporate private institutions and provided that incorporations should be under the general law. However, the new medical college was a legal corporation with nine trustees. Two of these were not residents of Cleveland. Only one of the trustees—Dr. Weber.—was a physician. No others of the trustees had prior experience in teaching or in conducting an educational institution. Therefore Dr. Weber dictated the educational policies. The six other

local trustees were business men who had contributed to the building of St. Vincent de Paul's Hospital. This constitution of the Board of Trustees was not in accord with the announcement in the first catalogue that "this is an institution of the profession, controlled and guided by its members. . . ."

Of the first faculty of ten professors and a demonstrator of anatomy, all, except the professor of legal medicine—a local lawyer—were graduates in medicine, and three were also graduates of colleges of arts or sciences. Three were graduates of the Medical Department of Western Reserve College, and one other had taken part of his training there. In the ensuing five years of the life of the institution, as replacements occurred, four more medical graduates of Reserve, and one who had taken part of his work there, became professors; so that in 1869-70, the final year of the institution, seven of the eleven professors were graduates or former students of the Medical Department of Western Reserve College (Appendix F). The faculty lacked stability. Five professors resigned between 1865 and 1869, and only one half of the original faculty continued through the six years that the institution existed.

Dr. Weber was the only member of the faculty in the six years who had been a professor in some other medical college. One other had been a demonstrator of anatomy and two had been professors in colleges of arts. The faculty was composed of men with little experience in medical institutional teaching. This fact made somewhat gratuitous the claim in the early announcements that the faculty was "highly capable"; although five of the professors were above the average capability in medical practice, only four had teaching experience.

The original faculty of ten contained five men who were not residents of Cleveland and who came one or two days each week to give their instruction. This left the intimate control of the institution to the five professors who were residents of Cleveland, one of them a lawyer. One of the four resident physicians resigned at the end of the first session and another at the end of the second session. Both were capable men and resigned because of disagreement with Dr. Weber. One was the professor of medicine. Replacements were made by non-

residents. Dr. Weber as the sole physician on the Board of Trustees, and as the professor of surgery, dean, and treasurer of the faculty, dominated the institution from the beginning.

The only other faculty officer was the secretary, an office held by Dr. James Henry Salisbury, Professor of Physiology, Histology, and Pathological Anatomy. He was a graduate of the Rensselaer Polytechnic Institute and of Albany Medical College in 1850, and had taught during several years in a normal school in New York state.

Dr. Salisbury was the administrative assistant of Dr. Weber and had his professional office in the business block where the medical college was conducted. He resigned after four years following a disagreement with Dr. Weber. These several resignations in the early years, and more later, show how idle was the published claim that the institution was conducted by "all the members of the profession and not by a clique of a few men." It is true there was no clique because this word implies more than one man; the conduct was largely by Dr. Weber.

Instruction began October 26, 1864 to a class of seventy-three students in the Hoffman Block, a business structure at the southeast corner of the Public Square and Superior Street, which also housed a miscellany consisting of retail stores, a bookbindery, offices of agents of varied sorts, and of professional men including dentists, lawyers, physicians—both regular and homeopathic—and a clairvoyant, who was classified in the city directory under the heading of "Physicians." Dissection was conducted "elsewhere" with no definite location stated. There were no laboratories; no library was mentioned.

The announced reason for founding the institution was "to meet the demand for reform in medical education with practical clinical teaching." This could not be put into effect in the first session because St. Vincent de Paul's (Charity) Hospital—"the basis of Charity Hospital Medical College"—was not yet completed. The only hospital available was the Army hospital at Camp Cleveland, three miles distant in the outskirts of the city, used for convalescent soldiers. Therefore military surgery was a prominent feature of the instruction in the first session, which was during the last year of the Civil War.

The new hospital was opened at the beginning of the second session. It contained a small amphitheater in which clinics were conducted; most of the instruction was in the rooms of the Hoffman Block; a mile distant. This continued throughout the life of the medical college, which at no time had a building entirely devoted to its work.

The catalogues carry little definite information about the curriculum. The repetitive course was used, in which all students attended all the instruction. The number of clinics was no greater than in medical colleges which had not attempted "to reform medical education." The difference was that the clinical amphitheater was an annex to a hospital building instead of being located in a medical college building.

One definite advance was made. Quizzes and recitations in other medical colleges were optional, and entailed an additional fee. In this institution two evenings of each week were devoted to quizzes included in the regular cost of tickets, which was $60 per session plus the usual charge of $5 each for matriculation and for dissection. The graduation fee was the usual one of $20.

The largest enrollment was one hundred in 1867-68 and the smallest was forty-nine in the final year of 1869-70, when dissension was rife in the faculty. The average attendance for six years was seventy-four students. The total number of graduates in course in six years from 1865 to 1870 inclusive was 193. The honorary degree of Doctor of Medicine was given to four men, all mature practitioners of central Ohio. In addition, 105 men attended some of the six sessions who did not attend a second session necessary to be graduated.

Diligent search has been made for the minutes of the trustees and of the faculty; neither set of records has been found. The statements in the catalogues and such items as were printed in newspapers and medical journals show little change in the institution in six years except in the field of resignations and replacements of teachers. The number of professors was increased from ten to eleven in the third session, and a lecturer was added in the final session.

Reminiscences and printed items show that many considered that Charity Hospital Medical College was founded to further the personal ambition of Dr. Weber and to combat the Medical Department of Western Reserve College in retaliation for his dismissal from its faculty. The prevalence of this opinion is substantiated by the fact that the second most important member of the faculty, in the introductory lecture to his course at the opening of the third session, felt it necessary to deny publicly this opinion in the following words: "Our college enterprise sprang from no spirit of mere personal ambition nor is it sustained by ill feeling towards any other medical school in the state."[1]

Two of the trustees resigned and were not replaced. The dissatisfaction that brought the resignation of one professor in 1865 and of another in 1866 did not subside. In 1868 two prominent professors resigned and in 1869 another one withdrew. The final session was stormy, and the student body was greatly diminished. A majority of the faculty withdrew at the end of the sixth session to reorganize under a Board of Trustees engaged in promoting general education and not dominated by a single member of the medical faculty. This was the end of Charity Hospital Medical College. The sequel will appear in the next section of this chapter.

The short life of this institution in itself is not impressive. Its importance lies in the fact that it was the initial phase of an educational endeavor which continued for forty more years. This was only one of the many personal proprietary medical colleges of the latter half of the nineteenth century that arose to satisfy the personal ambition of one or of a few men. The early claims that it would reform medical education in the Middle West were not realized. This institution had no influence outside Cleveland.

The Medical Department of the University of Wooster (1870-1896)

Although several sectarian colleges of arts existed in Ohio before the Civil War, under the Baptist, Congregational,

Methodist, and other denominations, the Presbyterians controlled no college in Ohio. They united with the Congregationalists to control Western Reserve College, founded in 1826 under the plan of union of the Congregationalists and Presbyterians.

The several synods of the Presbyterian Church in Ohio joined, in 1866, in founding the University of Wooster. It was located in the village of Wooster, fifty miles southwest of Cleveland. A faculty of arts of three professors, three instructors, and a lecturer was appointed, and the teachers began instruction in 1870; the first graduates in arts were admitted to degrees in 1871. The single lecturer was Dr. Leander Firestone, who held the title of Lecturer on Anatomy and Physiology, a position he retained during eighteen years until his death. The Firestone family was prominent in Wooster and contributed to the founding of the university there, and Dr. Leander Firestone, a medical practitioner of Wooster, was one of the incorporators and a trustee from 1866 until his death in 1888. He was an experienced medical teacher and a man with broad and unselfish interests.

The articles of incorporation provided for professional schools, and the name adopted indicated intention to establish them. In October 1867 the Board of Trustees passed the following resolution: "Whereas the plan of the University of Wooster includes a medical department therefore Resolved that a committee consisting of three persons be appointed whose duty it shall be to consider the propriety at once of organizing such a department in connection with the University and report at the next meeting of the Board; and that said committee also be instructed to designate the best place for the location of said department." Dr. Firestone was chairman of the committee which reported in December 1867 "recommending that no immediate action be taken, but that the proposed plan of building embrace an arrangement of rooms suitable for a medical department to be completed at such time as may seem proper to the Board." The report was adopted and the committee continued.[2]

This action shows that in 1867 it was the purpose to found a country medical college at Wooster in the near future. Matters rested for more than two years. Then on March 3, 1870 Dr. Firestone proposed to the trustees of the University of Wooster the establishment of a medical department in Cleveland. This was a sequel to the occurrences in the faculty of Charity Hospital Medical College a few weeks earlier, in which faculty Dr. Firestone was a leading member and led the opposition to Dr. Weber's control of the trustees of that institution. The trustees of the University of Wooster appointed a committee of five of its members, with Dr. Firestone as chairman, "to prepare a report for the next meeting of the Board." This report, presented May 10, 1870, recommended the establishment of the Medical Department of the University of Wooster in Cleveland to be conducted there "until it shall be deemed best by the trustees to remove it to Wooster."[3] The idea of a country medical college at Wooster still prevailed.

This report also recommended acceptance of "the offer of the authorities of Charity Hospital Medical College to transfer that institution to the University of Wooster." On the same day the Wooster trustees elected a medical faculty of eleven professors, identical, with the exception of one man, with the faculty of the Charity Hospital Medical College in its final session. One lecturer of 1869-70 was promoted to a professorship, and a few titles were slightly changed.

The instrument of transfer was signed by the officials of the trustees of Charity Hospital Medical College on April 26, 1870 and "transferred all property, museum, records and rights . . . provided that Wooster University will forthwith establish a medical department under its own charter, either in the City of Cleveland or in Wooster. . . ."[4] The language indicates that in late April 1870 decision had not yet been reached whether the University of Wooster would carry on medical education in Cleveland or in Wooster. Two weeks later the Wooster trustees decided to continue in Cleveland, at least temporarily.

Little property was transferred. The old organization had no building, no laboratories, and no library. Its possessions were

in its furniture, some museum specimens, and other teaching equipment. Its "rights" were the privileges of the use of clinical teaching material at St. Vincent de Paul's (Charity) Hospital.

The new organization continued to use the same rented rooms for teaching during the next four years. There was little change in the faculty. The important change was that the medical college came under control of a Board of Trustees interested in education in wide applications. In this board the chief adviser on medical education was Dr. Firestone.

The temporary status is shown by the fact that at the end of the first session members of the medical faculty made advances to the medical faculty of Western Reserve College for amalgamation of the two medical colleges. This was without result, but intermittent efforts to the same end continued in the next ten years.

The history of this institution falls into two periods, the first of eleven years from 1870 to 1881, the second of fourteen years from 1882 to 1896. The changes in the first period were few. The teaching staff varied from thirteen to seventeen men, with an average of fourteen. Eight professors resigned and were replaced in these eleven years. Dr. Weber continued as dean, and Dr. William Johnston Scott, as registrar and treasurer, was his chief administrative assistant.

The enrollment of fifty-nine students in the first year, when conditions were uncertain, increased until the attendance in 1880-81 was 113. The average for the eleven years was eighty-seven.

Few changes came in the curriculum. Two new subjects were recognized by inclusion in professorial titles. Otology was introduced in 1876, and the subject of nervous and mental diseases was first named in 1879. An optional laboratory course in chemistry was offered in 1877, nine years after a similar optional course was offered by its local rival. The institution was constantly behind the Medical Department of Western Reserve College in developing the curriculum.

The clinical teaching privileges at St. Vincent de Paul's (Charity) Hospital were exclusively controlled by this medical

college and its predecessor from 1864 to 1878, when an arrangement was made under which the medical departments of the University of Wooster and of Western Reserve College shared the privileges in this hospital and also in the Cleveland City Hospital, which theretofore had been exclusively under the Reserve faculty. An outpatient dispensary was established at the college building in 1877. In that year the weekly schedule carried thirty-three hours of didactic lectures and clinics and seven hours of evening recitations.

A major effort in the early years was to secure a better location for teaching than the rooms in the Hoffman Block. In September 1872 Dr. Firestone reported to the trustees "that an effort is on foot to raise money to erect a building in Cleveland and quite a number of citizens of Cleveland have subscribed liberally to the object."[5] This effort did not succeed, and the teaching continued to be given in the rented rooms in the business block.

The city of Cleveland in 1874 built a new school building to replace one that had been condemned as unsafe. Several members of the faculty formed a medical building association in which they paid for shares. The amount thus secured was used to purchase the old school building with addition of a mortgage loan of $5,000. Additional loans were necessary for repairing and remodeling so that the total cost when the building was ready for occupancy was over $11,000. This building—formerly the Brownell School—was on the east side of Brownell (now East Fourteenth) Street, south of Prospect Street and opposite the Erie Street Cemetery. It was a two-story brick structure, small in comparison to the building owned by the Medical Department of Western Reserve College. It was occupied at the beginning of the session of 1874-75, after ten years of instruction in the business block. It had the advantage of being near the hospital where the clinical teaching was done.

The important event which closed the first period was the union of the medical faculties in July 1881. The details of this action and the events that preceded it have been related in the final section of chapter VIII.

The second period of fourteen years began with an effort to reorganize the medical faculty. The constructive leader both in the faculty and in the Board of Trustees was Dr. Firestone and, quite properly, he was made dean of the new medical faculty. It was necessary in the reorganization to bring in new men without experience in medical teaching. This was true for seven of the twelve professors and one lecturer who constituted the new faculty. Two of them proved so unsatisfactory that they were kept during only one session. This new faculty contained three graduates of Charity Hospital Medical College or of the Medical Department of the University of Wooster and three graduates of the Medical Department of Western Reserve College. The professor of chemistry and toxicology was not a graduate in medicine. The remaining six men were graduates of medical colleges outside Cleveland.

Numerous changes in the faculty characterized this second period. Dr. Firestone resigned in 1884 and was made a professor emeritus, the first use of this title in this series of medical colleges. This was a deserved recognition of twenty years of effective teaching and eighteen years of leadership in medical affairs in the Board of Trustees. .Two men died while active professors, and twenty-eight other professors resigned in these fourteen years (Appendix F). Four of these resignations were requested. Six resignations came in 1884 coincident with the retirement of Dr. Firestone from the deanship.

The size of the teaching staff gradually increased. Beginning with fifteen in 1882, it had reached nineteen in 1890. Then, with adoption of the graded curriculum, further increase brought the teaching staff to thirty-five members in 1895-96. However, of this number only one half were professors, while ninety per cent of the teaching staff of 1882 were professors. This accorded with procedure in all medical colleges where adoption of the graded course and laboratory instruction about 1890 brought in many teachers in subordinate grades. These changes also brought changes in the curriculum comparable to those arising in the Medical Department of Western Reserve University described in chapter IX, although they were not introduced as

early nor as extensively. The institution lagged behind its local rival as it had done in the 'seventies.

The faculty voted in August 1889 to adopt a four-year graded course to become effective with the class entering in 1891. This action was soon revoked. The faculty instructed its delegate to the Association of American Medical Colleges in 1893 to vote for a three-year graded course of eight months but to postpone the four-year course as long as possible. The faculty in February 1895 declared in favor of a four-year course without setting any date for it to become effective. When the Association of American Medical Colleges requested that it became effective with the class entering in the autumn of 1895, the faculty refused the request.

The disorganization by the departure of all but three members of the faculty to join the Reserve faculty in July 1881 did not leave enough time to rebuild the faculty and begin instruction in September for the usual winter session. The reorganization was not completed and new members elected until February 13, 1882.[6] Therefore the service of the nine new faculty members dates from 1882 (Appendix F), not from 1881, as frequently stated concerning these men.

Instruction began early in March 1882 in what was usually called the spring session, and Commencement was held in July. A plan of continuous sessions was adopted with a spring session from February to July and a winter session from September to January, with two proposed commencements in each calendar year. However, in no year was a commencement held in January. The winter session became optional and the few students who attended were taught by recitations and a few clinics, without courses of lectures. On July 21, 1886 the faculty voted "to have only one term hereafter." This plan was carried in the catalogue until 1886, when announcement of the winter session ceased.

It is of interest that in 1887 the faculty discussed the question of establishing a dental school to be conducted in the fall and winter months when the medical college was not in session.[7] Although the plan was not adopted, it is the first record of

contemplation of founding a dental school in Cleveland. This was four years before such a school was begun in connection with one of the homeopathic medical colleges in Cleveland, and five years before the opening of the present School of Dentistry of Western Reserve University in 1892.

The Medical Department of the University of Wooster throughout the second period was beset by two difficulties: the lack of facilities for clinical teaching, and a small and inadequate building, both being serious handicaps in the competition for students. When the medical faculty was reorganized in 1882 it retained teaching privileges at Charity Hospital. This arrangement did not conflict with those of the Reserve faculty because the two medical colleges held their principal sessions at different seasons of the year. However, in 1884 the bishop of the Catholic diocese, who controlled this hospital, concluded that the interests of the hospital required a single staff in continuous service throughout the year, and the hospital came under the exclusive control of the Reserve medical faculty in July 1884.

This left the Wooster faculty with no hospital teaching facilities. In this situation an old residence on Huntington (now East Eighteenth) Street, adjoining the rear of the medical college building, was rented and fitted up for a small hospital of about twenty beds. The name first chosen was Weed Hospital to honor the professor of surgery who had just been elected as dean. The name was soon changed to University Hospital, an elaborate name for a small institution.

Repeated efforts were made to recover teaching privileges in Charity Hospital and to secure them in the Cleveland City Hospital. The Reserve medical faculty, in exclusive control in both of these hospitals, denied entrance to their rival. The Cleveland (Municipal) City Hospital was opened in 1891, and here the Wooster faculty shared the teaching privileges with the faculties of the three other local medical colleges, two of them homeopathic.

The small University Hospital was abandoned in 1894. In its place a group of the faculty formed a hospital association and purchased two old residences on Woodland Avenue, which were

fitted up as a private institution known as Cleveland General Hospital. The cost was large, involving a mortgage of $20,000. The partial privileges in the municipal hospital and the entire privileges in this new private hospital gave the medical college better clinical facilities than it had ever had.

The futile endeavor to merge the Wooster and Reserve faculties in the summer of 1893, and the subsequent resignation of five of the Reserve professors and their immediate appointment to the Wooster faculty, have been described in chapter IX. The accession of these five men added considerable strength to the Wooster faculty.

In the reorganization of the medical faculty in 1882, the Board of Trustees of the University of Wooster took ownership to the medical building by investing $4,500 to buy the shares in the building association that were held by members of the faculty.

The arrangement was that the faculty was to pay seven per cent interest on this investment, the interest on the mortgage of $5,000, certain small claims and loans, all tax assessments, and to keep the building in repair and fully insured.[8] All of this came to an annual obligation of over $1,000 on a building then considered to be worth $12,000. When the cost of conducting the medical college was added to this, there was little left from the only source of income, which was the fees paid by students. The result was that the faculty frequently had to make bank loans at the end of a session in anticipation of receipts from students in the following session. Also the faculty borrowed money from its individual members. When one professor, who had made such a loan, was requested to resign after a dispute, he threatened to sue all the members of the faculty jointly unless the amount he had loaned was immediately paid. He was not paid in full until three years later.

The financial condition of the medical college was such that no distribution of receipts was made to professors for several successive years. The only way to increase the income was to secure more students, which could not be done with the unfavorable teaching conditions.

The medical faculty repeatedly asked the Wooster trustees to

enlarge the medical building and to provide a hospital, and suggested that some of the endowment should be invested in such a project. The trustees replied that they could not do this and had no free funds to help the medical college. However, they gave the medical faculty permission to solicit money from Presbyterians in Cleveland in the name of the university. This brought no results because the leading Presbyterian clergyman in Cleveland—Dr. Hiram C. Haydn—was the president of Western Reserve University and had secured the financial support of the local Presbyterians of wealth for his institution.

The accession to the Wooster medical faculty of the professors who resigned from the Reserve faculty in 1893 was followed by plans for expansion in order to be able to compete for students on more nearly equal terms. This required a new building, and an appeal was again made to the Wooster trustees. When the trustees again replied that they were unable to do anything, the medical faculty notified the Wooster trustees that they planned to seek affiliation with another college of arts in Ohio that might help them to extend the facilities of the medical college. Some individuals approached the trustees of Ohio Wesleyan University in November 1894, but the affiliation with that university was not completed until March 1896.

The Wooster trustees voted in June 1896 to suspend their medical department after twenty-six years of operation, although they reserved the right to resume operation, which has never been exercised.[9]

This institution under the University of Wooster graduated 653 men and women in twenty-six classes. It granted eleven honorary degrees of Doctor of Medicine, the last in 1885. In addition, 476 men and women attended one or more sessions who were not granted the medical degree either by the University of Wooster or by its immediate successor. Of these nongraduates 271 received a medical degree at some other institution, seventy of them at the Medical Department of Western Reserve College or University.

This institution under the University of Wooster was one of the early regular medical colleges to adopt coeducation. The

first woman graduated by this institution received her degree in 1873. It was one of the moderately good medical colleges of its era. It lagged behind the leading institutions both in advancement of entrance requirements and in expansion of the curriculum. Many capable teachers were members of its faculty and its graduates held a good place in the medical profession. Its record in American medical education was superior to that of the institution which it replaced in 1870. The final record of the Wooster trustees regarding their medical department said that "it experienced many vicissitudes and had always been without the financial aid necessary to its highest success."[10]

The Medical Department of Ohio Wesleyan University

Adherents of the Methodist church founded Ohio Wesleyan University in 1842 at Delaware, in the central part of the state. Undergraduate instruction was begun in the same year. The charter gave power to organize professional departments. The records of the trustees show consideration of the establishment of a medical department at several different times.

Columbus, the capital of the state, was twenty-five miles distant. A group of physicians of that city in 1846 offered to provide a building and equipment for establishment of a Medical Department of Ohio Wesleyan University in Columbus. The trustees "received the proposition with favor" in August 1846.[11] The effort was not carried through, probably because a plan to remove an existent medical college to Columbus was considered more favorable. The Willoughby Medical College was removed from northern Ohio to Columbus in 1847.

A proposal was received by the Wesleyan trustees in 1850 to locate its medical department in Cincinnati. The trustees appointed a committee "to organize said Department in Cincinnati in 1851-52. . . ." This committee reported in June 1851 that Cincinnati had but one hospital, which was entirely under the control of the Medical College of Ohio, and that the legislature declined to give a new medical college equal privileges in that hospital;[12] the effort was abandoned.

A leading physician of Zanesville petitioned the trustees to or-

ganize a medical department of Ohio Wesleyan University in Zanesville.[13] This petition made in 1851 was referred to a committee without further action being recorded.

A committee of the trustees was appointed in 1869 to consider adoption of Starling Medical College, which had existed in Columbus since 1848. The question was further considered by the trustees in 1870 without definite action.[14] No further action in regard to medical education appeared until 1875, when the organization of a medical college on the campus at Delaware was considered, but definite positive action was not taken.[15]

The union of the medical faculties in Cleveland, the imminence of which was known in the medical profession before its actual consummation in July 1881, apparently meant that only one regular medical college would be in operation in northern Ohio. This is probably related to a communication received by the trustees of Ohio Wesleyan University in June 1881 from a group of physicians in Toledo, the second largest city in northern Ohio, asking these trustees to establish a medical department in that city. The trustees appointed a committee to report in June 1882.[16]

The Toledo School of Medicine had been in operation since 1878. It was one of those "quiz schools" then found in several American cities, unchartered and with no power to grant medical degrees. The ten teachers connected with it formally asked adoption by Ohio Wesleyan University in June 1882. However, by this time the University of Wooster had resumed medical education in Cleveland, probably a factor in the close vote by which the Ohio Wesleyan trustees resolved "that it is inexpedient to establish a medical department of the University at this time."[17] Then the Toledo physicians obtained an independent charter for the Toledo Medical College, which began instruction in 1882 and continued until 1914.

This series of events shows that in less than forty years the trustees of Ohio Wesleyan University gave consideration to the establishment of a medical department on six different occasions. The proposed location varied, twice in Columbus and

once each in Cincinnati, Zanesville, Delaware, and Toledo. This series of actions is not familiar in the history of medical education in Ohio.

The medical faculty of the University of Wooster received a communication from the president of the university in November 1894, in which he said that he could see no likelihood of provision for a new building for the medical college. The medical faculty then began to seek affiliation with some other college of arts that could help it to secure a new building. The old building lacked space for development of laboratory teaching, which the rapid change in medical education demanded if the medical college was to continue. Some members of the medical faculty asked the trustees of Ohio Wesleyan University for an affiliation, and the executive committee of those trustees gave a favorable answer on December 18, 1894.[18]

The medical faculty in May 1895 appointed a committee "to effect union with Ohio Wesleyan University." The selection of this institution, out of some fifty colleges of arts in Ohio, was based upon several facts. Ohio Wesleyan University was the oldest and largest institution in Ohio affiliated with the Methodist church; it had considered establishment of a medical department six times between 1846 and 1882; a new president was known to favor a policy of expansion and would probably be favorable to affiliation with a medical college that had been in continuous operation for thirty years and had a large body of alumni.

No educational institution with relations to the Methodist church existed in Cleveland and the city had many citizens of wealth who were Methodists and could be expected to support a medical college which was a department of a Methodist university. A further particular factor was that a favorable site for a medical college building on a corner near the medical school was the property of the First Wesleyan Methodist Church, the congregation of which had recently merged with another church having a better building, and had therefore abandoned the site it had occupied for many years.

At a meeting of the Ohio Wesleyan University trustees on

June 18, 1895 "President Bashford mentioned some steps that had been taken toward the establishment of a medical department of the university in Cleveland. The consideration of the matter was postponed till the midwinter session of the Board."[19]

The secretary of this Board of Trustees met with the medical faculty in Cleveland in November 1895, at which time a provisional plan of affiliation was approved by the medical faculty and its administrative committee was instructed to complete the details. Further instruction was given this committee on March 7, 1896 "to effect union with Ohio Wesleyan University without reference to a college building."[20]

Two events related to the affiliation had occurred recently. The medical faculty had adopted a secondary name in anticipation of the union and designated the institution as the Cleveland College of Physicians and Surgeons. The official name soon became Medical Department of Ohio Wesleyan University. Both names were printed on the catalogues, making a name of twelve words and eighty letters, too long for familiar use. The secondary name was more used locally and in conversation was usually abbreviated to "P and S." The choice of this secondary name invited confusion with some one or more of the seventeen other "Colleges of Physicians and Surgeons" that existed in fourteen states in the fourteen years of the life of the Cleveland institution. The other related event was the action of the trustees of the First Wesleyan Methodist Church in deeding its real estate to Ohio Wesleyan University on condition that a building for the medical department should be erected and completed before November 26, 1897.

The Board of Trustees of Ohio Wesleyan University met in Cleveland on March 20, 1896. A trustee reported pledges of over $20,000 toward paying the debt on the Cleveland General Hospital and erection of a new building for the medical college, and expressed his belief that the entire needed amount could be secured "as soon as the present financial stringency has passed away." Assurance was given that the relation between the medical college and the University of Wooster would be "dissolved amicably and with mutual consent."

The trustees then voted to make the Cleveland College of Physicians and Surgeons the Medical Department of Ohio Wesleyan University, with the provision that the university "shall in no event be held pecuniarily liable for any matter or thing pertaining to, or growing out of, said union."[21]

A contract was made between the medical faculty and the university contingent upon completion of a new building before November 26, 1897, which was not accomplished. The church trustees extended the condition of their deed to the land in January 1898 to expire in November 1900. The contract between the medical faculty and the university was renewed in June 1898 for a term of ten years, and in June 1905 further extended for a term of twenty-five years after 1908. Thereupon the medical faculty announced in the catalogue that the relation had become permanent.

Thus in March 1896 what had been the Medical Department of the University of Wooster for twenty-six years came under affiliation with another university. The medical faculty had swapped horses and announced that it was sure of a new building in 1897, a confidence that was not realized. The building owned by the University of Wooster was occupied by the medical college for four years, with payment of rental, after the affiliation with Ohio Wesleyan University. When the condition of the deed of the property of the First Wesleyan Methodist Church was not carried out and that deed lapsed, the medical faculty proposed to buy the building it was occupying, and in the spring of 1898 announced a proposal to remodel that building. This plan was abandoned when the church trustees granted a longer period for erection of a building on the lot which they had owned.

Endeavors were made during more than two years to secure gifts to pay for erection of a new medical college building, with limited success. Members of the faculty furnished enough money to begin building operations in the late summer of 1899. The foundations were in when the cornerstone was laid on September 28, 1899.[22]

A contract for the building at a cost of $26,000 was signed

on January 31, 1900, although only one half of the cost was in hand. This was done with expectation that additional gifts would be received before the building was completed. Only $3,000 more was received, and in September 1900 the trustees of Ohio Wesleyan University invested $10,000 of their endowment to pay the contractors of the building. Later they repaid to members of the faculty $5,000, which had been advanced by them. Thus the university had $15,000 of its endowment invested in the medical building besides the unstated value of the lot upon which the building stood. The faculty agreed to pay interest on this investment to the trustees, out of receipts from tuition. Few payments of interest were made.

The building was erected in 1900 and occupied with the opening of the session of 1900-01. It was dedicated on November 22, 1900. Public statement was made at this time that the value of the building and its equipment was conservatively placed at $60,000.[23] This estimate must have included the Cleveland General Hospital because the cost of the building and equipment in it was not over $35,000 and the land was by no means worth the difference between these two figures.

The building stood at the northwest corner of Central Avenue and Brownell Street (now East Fourteenth Street), and faced south. It was built of brick and was four stories in height. It was occupied by laboratories, lecture rooms, offices, and a dispensary in the first or basement story. Its use was chiefly for teaching laboratory subjects. The instruction to the classes of the third and fourth years was almost entirely at the hospitals.

Attendance did not increase as much as was expected after the new building was occupied, and continued small throughout the next ten years, although this institution was not in competition with the Medical Department of Western Reserve University because of different requirements of preliminary education.

The largest attendance was in 1896-97 and 1897-98. The four-year course began in 1896, the students entering in this year being scheduled for graduation in 1900. Those who entered in 1895 under the three-year course were ready for graduation in

1898. Therefore there was no prospective senior class for 1898-99. However, a class was created by the device of accepting as seniors eighteen graduates of homeopathic medical colleges. Fifteen of these, with six students belonging to earlier classes whose graduation had been delayed, constituted the graduating class of 1899.

The catalogue published in the spring of 1901 announced that the medical college would be in session throughout the year with three terms of four months each, and that two of these terms would constitute one of the four years of attendance required. This was similar to the plan adopted when this institution was the Medical Department of the University of Wooster in 1882. Both were devices to secure more students, and neither succeeded. The Medical Department of Ohio Wesleyan University abandoned this plan after one announcement. Subsequently it became operative in a few medical schools in the country, and in 1942 under the name of "accelerated plan" it was adopted by all medical schools to meet war conditions.

The discouraging small attendance resulted in a request from the dean to the Ohio Wesleyan trustees for permission to consolidate with the Medical Department of Western Reserve University. The trustees approved and a proposal was made to the Western Reserve medical faculty in October 1902. The two medical faculties could not agree on the terms of consolidation and the effort lapsed.[24]

Although the Ohio Wesleyan Medical Department had a good building for laboratory teaching after 1900, its clinical facilities were not extensive. It had teaching privileges in the City Hospital of 175 beds during four months of the year. Its chief teaching field in the remaining half of the session was the Cleveland General Hospital, with seventy-five beds. Some supplementary teaching facilities were controlled in Lutheran Hospital, Mount Sinai Hospital, St. Clair Hospital, and St. Johns Hospital, all small at that time. A little teaching was done at the Northern Ohio Hospital for the Insane. The major supplementary field was St. Alexis Hospital with 250 beds for one-half the year.

The need of a modern hospital of good size under full control brought the effort for a Methodist hospital in Cleveland to supplant the Cleveland General Hospital. St. Luke's Hospital was opened in 1908 and the Medical Department of Ohio Wesleyan University had exclusive teaching privileges. This institution had nearly one hundred beds and a good dispensary service.

The medical faculty asked the trustees of the university in January 1909 to place its medical department on the same basis as the other departments of the university. The trustees declined to do this but resolved to raise enough funds to discharge the indebtedness and provide an endowment for the medical department of $100,000. Nothing was accomplished in this effort.

Consolidation with the Medical Department of Western Reserve University

The survey of medical colleges under direction of the American Medical Association, which was begun about 1900, brought to public attention the existence of over 160 medical colleges in the United States. Opinion soon developed that this number could profitably be reduced, and under advice of the Council on Medical Education of the American Medical Association several mergers of medical colleges were secured within a few years. Standards of preliminary education, teaching facilities, and the number of full-time teachers on the faculty of an acceptable medical college continued to advance.

The Carnegie Foundation for the Advancement of Teaching conducted an independent survey in 1909. Mr. Abram Flexner, director of this study, publicly advised further mergers of medical colleges in several specifically named cities, among them Cleveland.

Mr. Flexner held conferences with the deans of the two regular medical colleges in Cleveland late in 1909, and in December wrote letters to the presidents of Ohio Wesleyan University and Western Reserve University advising consolidation of their medical departments in Cleveland. The officials of the two uni-

versities authorized beginning of negotiations between the two medical faculties early in January 1910.

Both faculties were receptive for the common reason that the end of factionalism in the medical profession of Cleveland was desirable and could not be fully attained as long as two rival medical colleges continued to exist. Each faculty had additional and different reasons for consolidation.

The officers of the Medical Department of Ohio Wesleyan University had been notified that in a classification of medical colleges soon to be published by the American Medical Association their institution would be given a rating of B, that is, second class. This was likely to affect attendance adversely. The president of Ohio Wesleyan University said to the executive committee of his trustees in April 1910: "Moreover there is no likelihood of our being able to maintain a medical school which will be equal to the new standards. Larger hospital facilities, greatly increased laboratories, more salaried instructors giving their whole time to teaching, mean expenditures altogether beyond us."[25] There was no prospect of independent endowment for the medical department after the futile effort of 1909.

There were then more medical colleges in Ohio than were considered needed and some of them would soon disappear, if not by consolidation, then by dissolution.

The major prospective benefit to the Medical Department of Western Reserve University in the consolidation was the control of the teaching facilities in the City Hospital throughout the teaching year. This would not only increase available clinical teaching material but would make possible a more satisfactory schedule.

The Ohio Wesleyan medical faculty designated Dr. Roland E. Skeel, its dean, and the Western Reserve faculty Dr. Frederick C. Waite, its secretary, to carry on the preliminary phases of the negotiations. These two men discussed conditions of the consolidation point by point, and as they came to agreement submitted their decisions to their faculties for approval or amendment. By this process, continuing for more than two months, an agreement containing twenty-one articles was formu-

lated.[28] This agreement was approved by the Ohio Wesleyan faculty on March 30, 1910 and by the Western Reserve faculty on April 20.

The negotiation involved several successive decisions. Mindful of the sequel of the union of faculties in 1881, the first action was to ask the authorities of Ohio Wesleyan University whether they would agree not to resume medical education in Cleveland if a consolidation was effected. They readily promised no resumption.

Agreement was soon reached regarding the transfer of the teaching privileges at City Hospital, with a provision that no Ohio Wesleyan faculty member should be displaced from his membership on the staff of that hospital.

It was agreed that the Ohio Wesleyan medical alumni, so far as each desired, should be elected to the Western Reserve Medical Alumni Association. This action included those who were originally alumni of the University of Wooster, adopted by the Ohio Wesleyan Medical Alumni Association in 1896. These men during more than thirty years since 1910 have aided in the alumni activities and have held office in the Western Reserve Medical Alumni Association.

These three factors of the consolidation presented little difficulty. Provision for completion of the medical education of the students who had been registered in 1909-10 in the Wesleyan medical college was less simple. Western Reserve University had required the completion of three years of work in a college of arts for entrance to its medical department since 1901, while Ohio Wesleyan University had required only graduation from high school. Obviously the Ohio Wesleyan medical students could not be accepted as candidates for the medical degree of Western Reserve University, except for three men who were graduates of a college of arts.

A plan was devised under which during the next three academic years a separate curriculum would be carried in the Western Reserve medical school for the Ohio Wesleyan students. Separate parallel classes were organized in the second, third, and fourth years, the lower class to be dropped at the end

of each session, and the Ohio Wesleyan students were to receive their medical degrees from Ohio Wesleyan University. This would normally continue for three years, but to provide for emergencies due to sickness or other causes the plan was to continue for four years and then finally terminate. No students were to be admitted to these Ohio Wesleyan classes except those who had been enrolled in the Ohio Wesleyan medical college in 1909-10. The number of students enrolled in the Ohio Wesleyan medical college after the class of 1910 had been graduated was seventy-three. Sixty-six of these enrolled in the Western Reserve medical school in October 1910. Sixty of these were graduated within the next four years, fifty-seven receiving the medical degree of Ohio Wesleyan University. Three men who were graduates of a college of arts were transferred to the Western Reserve group of students and were graduated by Western Reserve University.

Ohio Wesleyan University appointed a *pro forma* medical faculty of five members to recommend students to the trustees of Ohio Wesleyan University for its medical degree in 1911, 1912, 1913, and 1914.

The opinion prevailed in both medical faculties that the former Ohio Wesleyan students would be happier if they received the greater part of their instruction from men who had been members of the Ohio Wesleyan medical faculty. Moreover, parallel classes would require duplication of teaching and overburden the Western Reserve teaching staff unless additions were made to it.

Compilation showed that the additional teachers needed in 1910-11 would be about forty per cent of the forty-six teachers of the Ohio Wesleyan staff in 1909-10 of the grade of instructor or higher. Forty per cent of forty-six was eighteen, which happened to be exactly the number of Ohio Wesleyan full medical professors in 1909-10. The choice of the number eighteen made it possible to invite every Ohio Wesleyan medical professor to join the Western Reserve teaching staff.

These additional teachers would be needed only as long as Ohio Wesleyan medical students were receiving instruction.

Therefore it was agreed that eighteen men would be appointed to various grades for the terms attached to these grades in the practice of the Western Reserve faculty. Thus some appointments would expire parallel to the diminishing of the number of Ohio Wesleyan students.

The outcome of this plan was appointment of one clinical professor without term, five associate professors for five years, five assistant professors for three years, six lecturers and instructors for two years, and one demonstrator for one year. Thirteen of the Ohio Wesleyan professors were selected, the other five being men in grades lower than that of full professor.

A delicate feature of the negotiations was the selection by the Western Reserve faculty of eighteen out of the forty-six members of the Ohio Wesleyan teaching staff of the grade of instructor or higher. If the identity of these eighteen men were known in the Ohio Wesleyan faculty before the consolidation was completed, the twenty-eight men not selected might organize an opposition that would frustrate the whole plan. However, as long as each Ohio Wesleyan teacher felt that he might be selected, serious opposition was unlikely. Therefore, it was agreed that the Western Reserve faculty should not make its nominations of these additional teachers until after the trustees of both universities should have finally adopted the agreement of consolidation.

The negotiations between the faculties had not touched the question of the real property and equipment of the Wesleyan medical college because these belonged to the trustees, not to the medical faculty. However, one professor of each faculty joined in making an inventory of all furniture and movable equipment and agreed that the present worth was approximately $7,500.

Ohio Wesleyan University would not be able to use its real property and equipment if it retired from medical education in Cleveland. The Ohio Wesleyan trustees believed that a sale of it must be assured before final decision to suspend their medical department. They believed that they should recover the $15,000 of their productive endowment that had been in-

vested in the medical school building, together with the unpaid interest on this and also the value of the land which had been given to the university by the trustees of the First Wesleyan Methodist Church. The principal amount was $25,000 plus $7,500 of unpaid interest. They also believed that they should receive the present value of the equipment for which they had paid. Agreement had been reached that this was worth $7,500. This made a total financial consideration of $40,000 and the president of Ohio Wesleyan University communicated this sum to the president of Western Reserve University as a condition of the consolidation. An appraisal by a real estate agency showed $32,500 to be a fair price for the real property.

The executive officers of the two universities and the officers of the two medical faculties met in Cleveland on May 17, 1910. A dramatic moment came in this conference when President Welch of Ohio Wesleyan University, after saying that the arrangements regarding teachers, students, alumni, and hospital facilities were satisfactory, asked: "What are the arrangements for purchase of the property of Ohio Wesleyan University connected with its medical department?" President Thwing of Western Reserve University replied that he lacked authority to enter into any financial agreement. The Western Reserve trustees, while approving the proposed consolidation, had declined to accept any financial obligations because they were at this time engaged in an effort to increase the endowment of the medical school. It appeared that the consolidation of the two medical schools would fail after several months of effort, and with damage to both institutions.

Under designation by the Western Reserve medical faculty, I had participated in the conduct of the preliminary negotiations between the two medical faculties. I had foreseen possible failure from lack of provision for buying the real property and the equipment, and was prepared to meet such an emergency. After President Thwing had made his discouraging statement I offered to take a personal option for purchase of the real property and equipment at the price asked and proffered a certified check for a substantial part of the purchase price.

The executive committee of the Ohio Wesleyan trustees asked to be allowed to confer privately, and after a short consultation accepted the financial proposal and the agreement of consolidation was signed by the officers of both institutions within the hour. Thus after forty-six years of existence of rival regular medical colleges in Cleveland, an effective consolidation had been consummated following repeated ineffectual efforts at intervals during thirty-nine years.

The Western Reserve trustees made an appropriation to pay for the furniture and equipment before July 1, 1910, and this was distributed to various parts of the university, mainly to the medical department. The School of Pharmacy, affiliated with Western Reserve University, had long desired better and larger facilities than it had occupied, and the trustees of the School of Pharmacy on September 30, 1910 made a contract to purchase the building at the price of $32,500 and paid $10,000 on account. Therefore a single professor of the Reserve medical faculty was in control of a medical school building for only a little more than four months.

The School of Pharmacy occupied this building from 1910 until 1920, when it was sold for the headquarters of a labor union. The plan for widening East Fourteenth Street required part of the property. In 1933 the city bought the building and approximately half of the land, paying $60,000. The building was demolished soon after that purchase.

Summary

The teaching staff in 1896-97 had thirty-four members. This number had increased to fifty-two members in 1909-10. The total number of individuals who were members of the teaching staff in fourteen years was 123 men and two women. Forty-two men held the title of professor at some time in these fourteen years. The number of active professors in each year varied from seventeen to twenty-three with an average of twenty-one (Appendix F).

Nearly all the teachers were practicing physicians. Only a few were full-time teachers. One professor who taught a short

course in medical jurisprudence and another who gave a short course in medical ethics were not physicians. Three men who at some time taught these subjects in a grade lower than professor were not physicians.

This teaching staff included many excellent teachers. President Welch told the executive committee of his trustees in April 1910: "There are unquestionably six or eight or ten members of our medical faculty who are the equal in professional standing and teaching ability of any in this region."[27]

Ohio Wesleyan University graduated in medicine eighteen classes containing a total of 373 members, of whom twenty-eight were women. Fifty-seven of this total were graduated after the consolidation of 1910. Ten per cent of the graduates held a degree from a college of arts, and an additional five per cent were graduates of a school of pharmacy. In addition to those who were graduated, 165 students were enrolled who withdrew before graduation.

These students came mainly from northern Ohio, and seventy-seven per cent of the graduates practiced in northern Ohio, fifty-one per cent in Cleveland. The graduates had a reputable place in the medical profession and some of them became active in organized medicine.

President Welch said to the executive committee of his trustees in April 1910: "I suppose of the 150 medical colleges of the United States, our school would be ranked as about the middle. . . ." This was a fair statement. He also said at this time: "The medical department has never been a fully adopted portion of the university. The university . . . has elected its legal faculty and conferred degrees upon its graduates with only a distant knowledge of the facts and has had practically nothing to do with its internal organization and management. The future of the department has been treated as uncertain . . . and since 1904 the question of wisest procedure has been more or less continuously before the trustees and medical faculty."[28]

This condition was found in many medical colleges of that era that were nominally departments of universities with a relation that was actually only an affiliation of an institution man-

aged by the medical faculty and supported entirely from the tuition paid by students.

This medical college during fourteen years of affiliation with Ohio Wesleyan University was a better institution than it had been under its previous affiliation. After the new building was occupied in 1900 it had a better home than many medical colleges. It improved its standards and facilities, and developed its curriculum. Its life was in a period of rapid advance in the standards of American medical education and any school that was dependent entirely upon income from tuition had great difficulty in maintaining the advance. The deans who served in this period were all three capable administrators (Appendix F), and the history of the institution is one of united endeavor to give as good a medical training as facilities and resources would permit.

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XIV

HOMEOPATHIC MEDICAL EDUCATION IN CLEVELAND FROM 1850 TO 1914

THIS CHAPTER is inserted in a volume otherwise concerned with regular medical colleges because no printed account exists that covers the entire period of homeopathic medical education in Cleveland. The history that was published in 1905 is more biographical than institutional, is indefinite concerning many events and dates, and inaccurate respecting some of them.[1] The only institutional relation of the homeopathic medical colleges to the regular medical colleges of Cleveland occurred during about twenty years prior to 1914, when the faculty of the homeopathic medical college appointed the staff of the municipal hospital for one third of each year; members of the faculties of the regular medical colleges formed the staff during the remainder of the year.

A survey of homeopathic medical education in Cleveland shows little growth in the first twenty years, and instability, somewhat lessened in the latter part of its existence. Official names were frequently altered, location of teaching moved, deans often changed, and many teachers served during only a few years and with numerous modifications of teaching titles.

THE ORIGIN OF HOMEOPATHY

The homeopathic theory of therapy can be traced to Rome before the Christian Era, where one of the many medical cults of that time promulgated a doctrine of similars. The tenet was called the doctrine of signatures and was based on superstition. Its advocates held that the gods had indicated the human organs to which the medicinal properties of plants were adapted. A plant with leaves of the fancied shape of the liver was considered effective for the diseases of that organ, and a plant with a bloom resembling the shape of the testis was used for testicular diseases. The modern scientific names of these two groups of

plants—Hepaticae and Orchididae—are derived from the classical names of these human organs.

The homeopathic idea appeared sporadically in various forms in later centuries. Twice in the Middle Ages it developed a considerable following for a few decades and then was again dormant.

A third recrudescence arose in Germany at the end of the eighteenth century. Samuel Hahnemann (1755-1843), born in Saxony, was graduated in medicine at the University of Erlangen in 1779. He published two books on medical subjects before 1790, when he began a series of observations that led in 1796 to publication of an article in a German medical journal that is taken as the rebirth of the homeopathy of the nineteenth century. He announced in this article the dogma *similia similibus curentur,* like should cure like.[2]

He published several pamphlets and, in 1810, a book[3] in which he first used the word "homeopathy,"[4] a word derived from two Greek roots meaning "similar" and "disease," and he also coined the word "allopathy" to designate the prevailing method of medical practice.[5]

The physicians of the dominant method of medical practice considered the word "allopathy" an epithet and seldom used it. They called themselves regular physicians and included the homeopaths with other cultists, such as botanics, eclectics, hydropathists, and uroscopists, under a general designation of irregulars. The homeopaths resented being called irregular and in 1881 the American Institute of Homeopathy adopted a definition that a regular physician was "a graduate of a regularly incorporated medical college. The term also applies to a person practicing the healing art in accordance with the laws of the country in which he resides." They then said that a homeopathic physician was something in addition to this. They argued from this self definition that they were regular, a deduction not accepted by their opponents. When the word "homeopathy" lost its public appeal, the homeopaths called themselves "new school" as a distinction from the dominant system of medical practice which they called "old school." The phrase "new

school" had been used by the Thomsonians before 1830 and by other earlier cults. Notwithstanding all attempts to escape it, the word "irregular" clung to homeopathy, and to its colleges and practitioners.

Samuel Hahnemann moved about from town to town in Germany for forty years until 1835, when he went to Paris, where he remained until his death in 1843.[6] He acquired some converts in Germany and a few in France. However, the growth of homeopathy was meager, and thirty years after its resurrection in 1796 "the whole number of practitioners probably numbered less than a hundred men" according to a homeopathic historian.[7] These were confined to limited areas on the European continent. Homeopathy secured no early foothold in Great Britain.

Homeopathy in the United States

The first homeopathic practitioner in the United States was Hans Burch Gram. He was born in 1788 in Boston, Massachusetts, the son of a Danish father and an American mother. Both of his parents died while he was a youth. He went to Denmark in 1806 at the age of eighteen years, to claim an inheritance from his grandfather, a wealthy Danish sea captain. He was educated in Denmark and had a reputable practice as a regular physician in Copenhagen for several years. He was converted to homeopathy in 1823 or 1824 and in 1825 returned to the United States to begin the practice of homeopathy in New York City.[8]

Homeopathy grew but little in the United States in the next twenty years. Its practitioners were confined to a few students of Gram in New York City and a few converts who had come from Germany to eastern Pennsylvania in the 'thirties. Then in the early 'forties came a series of events in irregular medicine in the United States that gave opportunity to homeopathy.

Homeopathy and Thomsonianism

Samuel Thomson, a middle-aged farmer of southwestern New Hampshire, who could neither read nor write, in 1808 invented

what he erroneously called a new system of medical practice. Actually it was only a recrudescence of a limited part of ancient Galenic medicine. He named his cult "botanic medicine" and, with collaboration of an aged clergyman, wrote a book which constituted the basis of the cult. The first edition was published in Boston in 1822, which was followed by a second edition in 1824, and a third in 1825.[9] Fourteen more editions appeared before 1843.

The cult was soon popularly called Thomsonianism and had gained a large following in several separate regions of the United States between 1822 and 1843, when Samuel Thomson died. The cult, already embroiled in controversy, dissolved into several groups following his death.

Homeopathy and Thomsonianism had several common characteristics. Each relied almost entirely upon a single book published by its founder, and held that other education was less important than familiarity with the book. Each had a few dogmas upon which main dependence was placed. Each loudly decried the methods of medical practice which had been traditional in the American colonies and the United States during two centuries.

The sudden dissolution of Thomsonianism left without leadership a large number of practitioners and adherents for whom the propaganda of twenty years had made the regular system of medical practice anathema. Seeking some new lodestar, some of them readily accepted homeopathy with its several similarities.

The downfall of Thomsonianism and the sudden growth of homeopathy in the early 'forties were interrelated. Thomsonianism had been localized in several regions of the United States, and it was in these areas that homeopathy had its early growth. One of these regions was northeastern Ohio, where a son of Samuel Thomson lived and practiced and had a considerable following. Another area was southwestern Ohio, where the leading manufactory of Thomsonian medicaments was located and where the leading journal of the cult was published.

The literature of Thomsonianism that gives lists of names

of its practitioners is not extensive. However, in four regions where Thomsonianism was prevalent I have compared available lists of its practitioners before 1840 with lists of early homeopaths of these regions and have found many names and residences identical.

It was not difficult for one who had governed his practice by a single book written by Samuel Thomson to change for guidance to another single book written by another Samuel. Much evidence exists to indicate that many of the early recruits of homeopathy were former adherents of Samuel Thomson and that the debacle of Thomsonianism was a factor in the growth of homeopathy that immediately followed.

The historians of homeopathy have not given credit to Thomsonianism for preparing the ground for the early growth of homeopathy. The Thomsonians organized medical societies, and, after bitter opposition, secured court rulings in several states giving these societies the right to grant licenses for the legal practice of medicine, as had long been the privilege of the societies of regular medical practitioners. This put the practitioners of the Thomsonian cult on the same legal basis as the practitioners of regular medicine. Therefore the homeopaths had no difficulty in securing a legal status by organization of homeopathic medical societies to grant licenses to practice. The Thomsonians also established several medical journals, a few medical colleges, and a national medical society in the 'thirties. These preceded by several years similar establishments by homeopaths.

The historian of homeopathy says that "the noteworthy growth of Homeopathy in America was due to liberal laws."[10] He fails to acknowledge that this liberality of law was due to court decisions secured by the Thomsonians before homeopathy had any organization.

The Earliest Homeopathic Medical Colleges

Some of the converts of Hahnemann, who had come from Germany to eastern Pennsylvania in the early 'thirties, became preceptors of students under the method of medical education

by apprenticeship. The first institution to teach homeopathy was located at Allentown, Pennsylvania. The legislature of that state, on July 17, 1836, granted a charter for the North American Academy of the Homeopathic Healing Art empowering it to grant medical degrees. This institution was popularly called the Allentown Academy. Instruction was entirely in the German language and therefore available only to a limited group.[11] Instruction began in 1836 and continued intermittently for six years. Attendance was small and irregular, mainly by men who were already practicing homeopathy. The few degrees granted were mostly to the men who were the teachers. The first American edition of the *Organon* was published at Allentown in 1836.

Some who had taught or attended at Allentown led in organization of the Hahnemann Medical College of Pennsylvania, at Philadelphia, which secured a charter in April 1848 and began instruction in October of that year with the first graduating class of six men in March 1849.[12] This is usually called the first homeopathic medical college, the short-lived and inefficient Allentown Academy being ignored.

First Institutional Teaching of Homeopathy in Ohio

The first institutional teaching of homeopathy in Ohio was in a medical college devoted to another medical sect. When Thomsonianism fell apart in 1843 several groups were formed from its remnants. The best group called themselves eclectics, a designation used by a medical cult in Rome at the beginning of the Christian Era and in use by a few cultists in Great Britain about 1840. The eclectics claimed that they took all that was good from all other methods of practice and discarded all that was erroneous.

A group of former Thomsonians established the Eclectic Medical Institute at Cincinnati. Incorporation was secured in March 1845,[13] and instruction began in November of that year. The leaders in the venture were men who had conducted Worthington Medical College, a Thomsonian institution operated at Worthington, Ohio, from 1830 to 1840.[14]

The fact that many former Thomsonians were becoming

homeopaths by self proclamation threatened the existence of the infant eclecticism. The claims of eclecticism, under its self definition, might well include any meritorious features of homeopathy. In one particular the two sects were similar. Each administered only one drug at a time to a patient. The eclectics called this specific medication, a term not used by the homeopaths. The eclectics did not subscribe to the doctrine of similars nor to that of dilutions, the two prominent dogmas of homeopathy.

The Eclectic Medical Institute of Cincinnati was the only medical college of that sect in 1849. A few converts of homeopathy met in Cleveland in May 1849, and, inspired by the establishment of a homeopathic medical college in Philadelphia a year earlier, discussed the founding of a similar institution in Cleveland. This was a serious threat to the eclectic institution in Cincinnati, because the large number of former adherents of Thomsonianism in Ohio made that state the best hunting ground in the entire country for converts to either sect.

Two weeks after the informal discussion by five converts to homeopathy in Cleveland, the authorities of the Eclectic Medical Institute voted to establish a professorship of the principles and practice of homeopathy, and proposed that, although all its medical students would be required to take the instruction in eclectic therapy, those who chose to do so might in addition attend instruction in homeopathy, and, on completion of their course, receive two degrees and two diplomas, one in eclecticism and the other in homeopathy. Under this plan six men were graduated in March 1850 with both degrees.

The dean of the Eclectic Medical Institute issued a circular letter under date of June 9, 1849 asking "the homeopathic physicians of the United States" to nominate a candidate for the newly established chair of homeopathy. The five men who had conferred in Cleveland a month earlier constituted themselves "the homeopathic physicians of the United States," and on June 26 they nominated Dr. Storm Rosa of Painesville, Ohio, who was appointed.[15] Thus these two new medical sects became bedfellows, but not for long.

Dr. Rosa was the most competent of the few men in Ohio who had embraced homeopathy at this time. He was born in Coxsackie, New York, in 1791 and studied medicine under a preceptor. He was licensed by a medical society in New York in 1816 and immediately went to northeastern Ohio, where he practiced at Madison for two years and then located in Painesville.[16]

When the Medical Department of Willoughby University of Lake Erie was organized in 1834, Dr. Rosa was appointed adjunct professor of materia medica and taught during one session. That institution conferred upon him in 1837 the honorary degree of Doctor of Medicine.[17] Dr. Rosa announced himself a convert to homeopathy in 1843, one of the earliest in northern Ohio.[18] Thomsonianism did not fall apart until late in that year.

Dr. Rosa taught at the Eclectic Medical Institute during only the session from November 1849 to March 1850. The eclectics and homeopaths were incompatible and Dr. Rosa was soon in controversy with other members of the teaching staff. It was evident, after a few weeks, that the relation could not continue, although Dr. Rosa was not officially dismissed from his professorship until a meeting of the trustees on August 22, 1850, when the favorite method of abolishing a professorship was adopted; to which action was added the following comment: "A special homeopathic professorship is of no utility. The homeopathic party is in reality but a more subtle form of medical hunkerism (a political epithet for a conservative first used in 1845), the progress of which tends to delude and contract the mind and hinder the free progress of medical science. The homeopathic system is but a limited portion of medical science and contains practical errors, delusions, and false philosophy. . . ."[19]

The attempt of the eclectics to absorb homeopathy had failed. Homeopathy had not only been kicked out by its bedfellow, but the eclectics, considered the closest friends of homeopathy, had formally and publicly confirmed the opinion of homeopathy expressed by regular physicians for twenty-five years.

The homeopaths changed their opinion of the eclectics and considered them worse enemies than the regulars. However, in later years many men changed by self proclamation from eclecticism to homeopathy or from homeopathy to eclecticism, influenced by the popular opinion of the two sects in the community where a practitioner was located. Some individuals announced that they practiced both eclecticism and homeopathy.

The Western College of Homeopathic Medicine

The incompatibility of a professorship of homeopathy in the Eclectic Medical Institute was demonstrated early in the winter of 1850 and it was evident that the relation would soon end. Therefore the possibility of founding a homeopathic medical college in Cleveland, which had been discussed in May 1849 and dismissed with the appointment of Dr. Rosa, was revived, and an application made to the legislature for a charter which was granted March 1, 1850.[20]

The session of the Eclectic Medical Institute closed on March 6, 1850. Two weeks later, on March 20, 1850, a meeting of "the homeopaths of the West" was held in Cleveland. Nearly all who attended were residents of northeastern Ohio. The small group, after preliminary decision to found a medical college, adjourned for two months with the hope of securing a larger number to participate in the venture. A somewhat larger group assembled on June 12, 1850 and selected a faculty of seven men.

The claim has long been published that the institution in Cleveland was founded in 1849. The series of events do not warrant this claim. The meeting in May 1849 was an informal conference of five men. Its chief importance was derived from its stimulus to the creation of the professorship of homeopathy in Cincinnati, and when that professorship was filled all efforts to found a medical college in Cleveland ceased until the early months of 1850. It was not until March 1850 that a charter was granted, and not until November 1850 that instruction was begun. Either of these two events, or the meeting of June 1850 at which a faculty was selected, may justly be considered as the

date of founding. In any case 1850 is the correct year of founding.

Two of the seven men selected in June 1850 declined and were replaced. The faculty that began instruction in November 1850 included three residents of Cleveland—only one of them a practicing physician—two residents of other communities in northern Ohio, one resident of Central New York, and one resident of Michigan. Only the last mentioned of these had received any institutional instruction in homeopathy. He had been graduated at the homeopathic medical college in Philadelphia as a member of its second class in March 1850. The four other medical practitioners were all homeopaths by self proclamation, their acquaintance with homeopathy coming only from reading the *Organon.*

The initials M.D. were placed after the names of all the teachers in the catalogue. This was gratuitous for three, and probably for four of them. Two of the number had never studied medicine. They were teachers in the public schools of Cleveland and taught chemistry and physics in the new medical college. Five of the faculty were medical practitioners. The leader of these claimed graduation from a regular medical college. However, the official records of that institution show that he attended only one session and did not receive a medical degree. One of the five was a graduate of a homeopathic medical college in course; another was a graduate in course of a regular medical college. A fourth member of the group held an honorary degree from a regular medical college. I have made extensive search without success, for the medical college, if any, attended by the fifth man. I conclude that he had no institutional medical education although he had practiced medicine for a short time. He was primarily a naturalist and taught anatomy.

The faculty was unstable in the early years. Twenty-five different men occupied the seven professorships in the first ten years, no one of them serving more than five years. The men were frequently shifted from one professorship to another, a system giving little opportunity to gain proficiency in teaching any one subject.

Inasmuch as this chapter is a sketch and does not claim to be

a history, nothing is included concerning curriculum or standards. It is concerned with events rather than with men, and the naming of individuals is purposely avoided. The long list of names of men and women who occupied teaching positions in the homeopathic medical colleges of Cleveland before 1905 is available in the first chapter of the third volume of King's *History of Homeopathy and its Institutions in America.*

Frequent Changes of Abode

Instruction began November 1, 1850 in rented quarters in the upper two stories of a business block at the corner of Ontario Street and Prospect Street.[21] These premises had been occupied by the Medical Department of Western Reserve College in its first two years from 1843 to 1845.

The Western College of Homeopathic Medicine occupied this location during its first session and the greater part of its second session. Early in February 1852, a mob, seeking the body of a young woman removed from a grave in a neighboring village, attacked the medical college and, gaining entrance, destroyed all the furniture and teaching equipment and seriously damaged the building.[22] It was impossible to continue the teaching. Nevertheless a class of twenty-one was graduated three weeks later without having had the final fifth of the course.

The faculty raised money by popular subscription to replace some of the teaching equipment, and secured a building about a half a mile south of the first location. This building was on Ohio Street, west of Pittsburgh Road (now Broadway) and was occupied for sixteen years.

Cleveland University was organized in 1850. Its trustees purchased a large tract of farm land west of the Cuyahoga River in a region called the South Side because at this place the river, in its meanderings, flowed from east to west. Here, a building, with an attached dormitory, was erected for the university. However, controversy arose and the university closed in 1854.

A young man teaching in a private academy in Cleveland acquired the property and established an academy which he

conducted until 1868, when he entered another vocation and the property was for sale.

The homeopaths entered into a land contract in April 1868 to purchase the building and a part of the land for $35,000, with an agreement to pay a rental of $1,320 a year until the title should be acquired.[23] In the fall of 1868 the homeopathic medical college was moved from Ohio Street to its third location in the building of the extinct Cleveland University. A hospital of fifty beds was installed in the attached dormitory.

The location was unsuitable. It was two miles distant from the business portion of the city where the practicing physicians who were professors had their professional offices. The deep river valley had to be crossed to reach the medical college and no system of public transportation extended to the vicinity. After two sessions, the faculty voted in March 1870 to return to some location nearer the center of the city.[24] This was not accomplished until two years later.

The Plymouth Congregational Church, which had been located on the north side of Prospect Street, a few hundred feet west of Erie (now East Ninth) Street since 1857, moved in 1872 to a new building a half mile farther east. The homeopathic medical college bought the old church building, and after some remodeling, occupied it at the beginning of the session of 1872-73. This fourth location was used for twenty years. The third location had been occupied during only four years.

The hospital remained at the old location for a few months; then the former residence of a member of the faculty was secured, in which the hospital was installed in February 1873. Its location was on the south side of Huron Street a few hundred feet from the medical college in the old church building.

Homeopathy was popular in Cleveland in the late 'seventies and many of the wealthy families employed homeopathic physicians. Therefore the homeopaths were able to secure the financial aid of wealthy laymen to erect a new hospital building. Construction began in April 1879 and was completed in December of that year.[25] The new hospital of 125 beds was on the south side of Huron Street adjacent to the residence that had

been used as a hospital for six years. The former name of Cleveland Homeopathic Hospital was retained for over thirty years, when the name was changed to Huron Road Hospital.

The introduction of laboratory instruction into medical colleges in the late 'eighties made it apparent that the Cleveland Homeopathic Hospital Medical College must enlarge its facilities. The old church building was unsuitable for installation of laboratories. A new building for the medical college was imperative, especially in view of the fact that a rival local homeopathic college was erecting a new building. The cornerstone was laid for a new building on September 24, 1891,[26] and the building was completed and occupied with the opening of the session of 1892-93. The building was on the south side of Huron Street, adjacent to the hospital.

Thus after occupying four different buildings in forty-two years, none of which was built for purposes of medical teaching, the medical college acquired a building planned for its needs. This building was used for twenty-two years until institutional homeopathic medical education in Cleveland terminated in 1914. Both the hospital and medical college buildings were sold in 1924 and soon razed to give place to a large business block erected for the local telephone company.

Two institutions teaching homeopathy in Cleveland were offshoots of the parent medical college. The first was the Cleveland Homeopathic College for Women, organized in 1867. It occupied "rooms over Wamelink's music store" for its first session.[27] The location was on the north side of Superior Street, east of the Public Square. The institution moved at the beginning of the session of 1868-69 to rented quarters at the junction of Huron Street and Prospect Street.

A division in the faculty of the medical college in 1890 brought organization of the rival Cleveland Medical College, which secured a charter on July 1, 1890. Instruction began in September 1890 in rented quarters on Prospect Street. A building for it was erected in 1891 and 1892 on Bolivar Street, the rear of the building being adjacent to the homeopathic hospital.[28] This building was occupied from September 1891 until

June 1897, when the rival medical college was merged with the parent institution.

Thus homeopathic medical education in Cleveland during sixty-four years was carried on in nine different buildings. At least five of these, and possibly six of them, were rented. I have been unable to find a record as to whether the building on Ohio Street, used from 1852 until 1868, was rented or owned by the medical college.

Many Changes of Name

The original name of Western College of Homeopathic Medicine was retained for only six years and was changed February 27, 1856 to Western College of Homeopathy. The historian gives no reason for this change.[29] Their battle cry was homeopathy and possibly the original name seemed to emphasize medicine too much and homeopathy not enough.

Five of the seven professors resigned in 1859 and departed to found a new homeopathic medical college in St. Louis. The replacement of these men brought in a new group which changed the name on July 24, 1860 to Western Homeopathic College and secured a new charter,[30] two charters and three names in ten years.

Establishment of homeopathic medical colleges in Chicago and St. Louis made the word "western" unsuitable for an institution in Cleveland. A fourth name was adopted in 1864. The records of the trustees do not give the adoption of this name. However, the catalogues for six years from 1864 on, bear the caption Cleveland Homeopathic College.

For eighteen years clinical facilities were restricted to a dispensary service in the college building and a few privileges in two small private hospitals and in the City Infirmary when members of the medical faculty happened to be connected with these institutions.

Charity Hospital was built in the 'sixties and the catalogues of the homeopathic medical college printed in 1864 and 1865 stated that the homeopathic medical faculty would have teaching privileges in this hospital when completed. However, when

the hospital was opened the chief of staff was one who would have nothing to do with homeopathy and the homeopathic faculty and students were excluded.

Charity Hospital was under the control of the Catholic diocese. Considerable anti-Catholic feeling prevailed in Cleveland and in 1866 an organization was formed to open a Protestant hospital. A charter for the Cleveland Protestant Homeopathic Hospital had been secured in 1867, but little was done for a year, when this corporation joined with that of the medical college in securing the old Cleveland University buildings, which were occupied, and a hospital of about fifty beds opened there on October 31, 1868.

At this time there were six medical colleges in the United States that included the word "hospital" in their official names, following the British custom. Two of these were homeopathic. One was a regular medical college in Cleveland, which changed its name in 1870 leaving out the word "hospital." The homeopathic medical college, having finally secured a hospital entirely under its control, changed its name in 1870 to Cleveland Homeopathic Hospital College. In twenty years the institution had operated under five different names, the longest period under one name being six years.

This fifth name was used for twenty-four years. A dental department was organized in 1891, which continued five years. I have described elsewhere the history of this dental department.[31] The dental department appeared to justify a more ambitious name, and in 1894 the official name was changed to Cleveland University of Medicine and Surgery. For the first time the word "homeopathy" did not appear in the official name. In the first catalogue bearing the new name the naive reason given for this omission was that homeopathy was no longer anything distinct, a statement that would have been considered rank heresy a few years earlier.

This medical college was merged with its rival in 1897, when a seventh official name was chosen, Cleveland Homeopathic Medical College. This was done by the same men who had publicly announced three years earlier that the word

"homeopathy" should not be included in the name of a medical college because it was no longer anything distinct. This seventh name resembled the name used from 1864 to 1870, yet was not identical.

The name Cleveland Homeopathic Medical College was used for thirteen years. In 1910 the Pulte Medical College of Cincinnati was closed and its meager equipment and few students were moved to Cleveland, a union marked by an eighth name, again not using the word "homeopathy." The new name was Cleveland-Pulte Medical College, used until it closed in 1914. This institution effected an affiliation with Baldwin University, a college of arts located twelve miles distant, and for a few years the catalogues carry the subordinate name of Medical Department of Baldwin University.

A medical college restricted to women was established in 1867 with the name of Cleveland Homeopathic College for Women. A division in the faculty of the parent institution in 1890 brought the founding of a rival medical college which did not use the word "homeopathy" in its name. The word had lost its public appeal and was unlikely to attract students. The name Cleveland Medical College was adopted. This had been the secondary and popular name of the Medical Department of Western Reserve College, a regular medical college, from 1843 to 1881, during which period that institution had acquired a wide reputation for excellence.

Many of those who had been graduated from the regular medical college when it was popularly called Cleveland Medical College, charged that the adoption of the same name by the new homeopathic institution was a deliberate plan to trade on the reputation of the earlier regular college and to confuse the public mind. Whether or not a purpose to confuse existed, confusion resulted, and extended even to the national medical directory published biennially. Each medical college had a code number in that directory and these code numbers were attached to the names of individuals in the directory. In several editions following 1890 the names of many graduates of the regular medical college before 1881 had attached to their names the

code number of the new homeopathic medical college, much to the chagrin of these regular physicians. Also the names of some graduates of the homeopathic college had attached the code number of the former regular medical college, probably to their delight because the reputation of the old regular medical college was far wider than that of the new homepathic institution.

Homeopathic institutional medical education in Cleveland during sixty-four years was conducted under ten different official names. The succession of names of the parent institution were: Western College of Homeopathic Medicine (six years); Western College of Homeopathy (four years); Western Homeopathic College (four years); Cleveland Homeopathic College (six years); Cleveland Homeopathic Hospital College (twenty-four years); Cleveland University of Medicine and Surgery (three years); Cleveland Homeopathic Medical College (thirteen years); Cleveland-Pulte Medical College (four years). To this list must be added Cleveland Homeopathic College for Women (four years) and Cleveland Medical College (seven years). Eight different names for the parent institution in sixty-four years is an index of instability.

Enrollment of Students

I have found no statistical table of attendance in the homeopathic medical colleges of Cleveland, nor is a complete file of catalogues available. The historian of the early institution says that "about sixty" attended the first session. Twenty-five years later the catalogue of 1875-76 shows sixty students. An incomplete file of catalogues for the intervening years shows as few as forty-nine and as many as ninety-nine matriculants in different years. The word "matriculants" heading a list of names is likely to mislead. Matriculants were those who had applied for admission and paid the matriculation fee; some of them never attended. The institution had no sustained growth in its first twenty-five years.

The prospect of early occupancy of the new hospital building brought more students, and in 1880-81, the first entire session

after the hospital was occupied, the attendance was 131, the largest in the thirty years that the institution had existed. Many students came from other homeopathic medical colleges to pass their final session in one of the few homeopathic medical colleges that controlled a good hospital. Attendance decreased in the 'eighties, due in part to dissensions in the faculty. Occupancy of new medical college buildings by both medical colleges in 1892 brought increased attendance.

The largest number of homeopathic medical students in Cleveland occurred in the 'nineties, when most of the regular medical colleges were advancing their educational requirements for entrance while all the sectarian medical colleges showed extreme leniency. The attendance in 1897-98, the first session after the consolidation of the two rival medical colleges, was 198, and then decreased each year to 150 in 1901-02. Rapid decrease followed. In 1903-04 attendance was less than 100 students, and five years later, in 1908-09, enrollment was only forty-one, the lowest in the history of the institution.

The consolidation with Pulte Medical College in 1910 resulted in some increase, the enrollment in 1910-11 being eighty-one students. A decrease followed until in the final year of 1913-14 fifty-three students attended. The cause of the rapid decrease of attendance after 1900 will presently be explained.

Homeopathic Medical Education of Women in Cleveland

The first woman to be graduated in medicine in the United States received her degree in January 1849. This event brought much public discussion. Nearly all regular physicians were opposed to coeducation in medicine. The woman suffragists supported it. All regular medical colleges except two refused to admit women as students. The homeopathic medical college in Philadelphia also declined their applications.

Early in 1850 the founding of a new eclectic medical college in Rochester, New York, was announced with a statement that women would be admitted. The second woman graduate in medicine in the United States received her medical degree there in 1850.[32]

An opportunity was presented to the new homeopathic medical college in Cleveland both to enroll additional students and to gain the support of the woman suffragists, then a voluble group with some influence. At its first session three women were admitted. One of these was Helen Cook, who was graduated February 28, 1852 as the second woman to receive a medical degree from any institution west of the Allegheny Mountains. Nancy Clarke had been graduated by the Medical Department of Western Reserve College in Cleveland three days earlier.

The homeopathic medical college in Cleveland continued to admit women during the 'fifties, although women were not in attendance every year. In that decade a total of eleven women were graduated: one in 1852, three in 1854, one in 1858, and six in 1859. The faculty lacked agreement on coeducation and a compromise was attempted by creation of a new degree with a shorter course. The degree was Doctor of Obstetrics and Gynecology with the symbol O.G.D. One woman took this degree in 1858 and another in 1860.

Reorganization of the faculty in 1860 brought in new men, some of them opposed to coeducation. An unsuccessful endeavor was made in 1863 to exclude women. A year later the catalogue printed in the spring of 1864 says: "Though not opposed to the medical education of women in schools set apart for them exclusively, we are conscious by observation and experience that the association of both sexes in the same medical school is detrimental to both. Therefore we feel compelled henceforth to deny admission to female students. A homeopathic medical college for women exclusively has been established in New York City." This statement appeared again in the catalogue printed in the spring of 1865.

Nothing concerning admission of women appears in the catalogue printed in the spring of 1866 nor in that of 1867. However, a change of attitude was developing in the faculty and in August 1867 the faculty voted to admit women. Five women enrolled at the beginning of the session of 1867-68. They were disturbed by an action of the faculty four weeks later when the announcement was made that no women would

be granted the degree of Doctor of Medicine except those who had been enrolled in the Western College of Homeopathy, that is before 1860. Women would be permitted to attend as special students and secure the degree of Doctor of Obstetrics and Gynecology.

The young women who had been admitted a few weeks earlier protested at being denied the degree of Doctor of Medicine; the limited degree did not satisfy them. The faculty remained obdurate, even after the circulation of public petitions. Then came recourse to a procedure frequent in the nineteenth century, the organization of a rival medical college.

The Cleveland Homeopathic College for Women was organized in October 1867, began instruction early in December, secured a charter in January, and graduated its first class in March 1868. When it was organized the faculty of the college for men withdrew the privilege to women of attending as special students.

The new institution had a faculty of nine professors, one of whom was a woman, who was also president. Attendance at the first session was "about forty" which included women invited to attend as guests because they had sponsored the enterprise. Fewer than ten students were taking the course leading to the degree of Doctor of Medicine. Nineteen students attended in 1868-69, seventeen in 1869-70 and again seventeen in 1870-71. Graduates were four in 1869, six in 1870 and seven in 1871.[33]

The establishment of the rival institution brought a change of attitude in the faculty of the college for men and in the catalogue printed in the spring of 1868 appears an offer to admit women. The faculty did not recant its opinion published in 1864 and 1865 that coeducation was detrimental to both sexes. Instead it gave the naive reason that more room would be available with removal to the new building in the fall of 1868.

The offer to admit women was repeated in the catalogue printed in the spring of 1869 and in 1870 was expanded to a long paragraph pleading with women to enter. The attendance of men students had been falling off.

The medical college for women closed in 1871 after holding four sessions with small attendance and was absorbed by the parent institution. Thereafter women were admitted continuously to the homeopathic medical colleges of Cleveland.[34]

The total number of women who received the degree of Doctor of Medicine from all the homeopathic medical colleges in Cleveland from 1852 to 1914 is about 260. The exact number cannot be determined because of lack of record or catalogues for three different years. The number of women graduated by the regular medical colleges of Cleveland before 1915 was sixty-four.

Crises in the History of the Institution

The first crisis came after two years when the mob of February 1852 destroyed such teaching equipment as had been assembled. The second crisis came seven years later when five of the leading professors resigned and sought to remove the institution to St. Louis where they founded the first homeopathic medical college west of the Mississippi River. The vacancies in the faculty were filled and instruction continued without interruption.

The removal of the medical college in 1868 to a location remote from the center of the city brought decreased attendance and increased expense. Dissensions in the faculty resulted as well as controversy with the Board of Trustees, which was composed of business men and men of other professions than medicine. This dissatisfaction increased until 1872, when the lay Board of Trustees resigned and the faculty became the trustees and took charge of all financial matters.

Coincidentally another difficulty arose when a homeopathic medical college was organized in Cincinnati in 1872. It was named Pulte Medical College in honor of a physician who contributed a considerable sum of money for its foundation. The new institution promised to have better facilities and equipment than the Cleveland institution, and a proposal was made to close the medical college in Cleveland and unite with the

one in Cincinnati. This plan was defeated and the medical college in Cleveland moved to less expensive and more accessible quarters.

However, the acquisition of financial control by the faculty brought two distinct factions. About 1880 these factions came to be led by two aggressive members of the faculty. This accentuated the dissension and resulted in secession of part of the faculty to found a rival institution in 1890. The homeopathic members of the medical profession of Cleveland after 1872 were involved in factional controversy similar to that which had beset the regular members of the profession after 1864. The controversy damaged the prestige of homeopathy in the city and resulted in diminishing public confidence.

The final crisis of homeopathic medical education in Cleveland, although not immediately appreciated, originated with the advance in the quality of medical teaching inaugurated by a minority of the regular medical colleges in the late 'eighties. Gradually more of the regular medical colleges joined the advance, while all the sectarian medical colleges lagged behind in adopting the graded course, in advancing entrance requirements, in lengthening the session, in adopting laboratory teaching, and in increasing the number of sessions in the course from three to four before graduation.

Some of the regular medical colleges did not follow the advance any more than did the sectarian institutions, and at the beginning of the twentieth century, while the majority of regular medical colleges had made much improvement, a minority group of them existed that were not providing adequate medical training as measured by the standards that had been reached by that time.

Early in the first decade of the twentieth century, the American Medical Association appointed a permanent council on medical education in an attempt to raise the general standard of medical teaching. The first action of this committee was an endeavor to ascertain the facts by inspection of each institution. The catalogues of some medical colleges contained more fiction

than fact. Although this committee was primarily concerned with the regular medical colleges, the investigation was soon extended to include the sectarian medical colleges. A continuous study resulted in publication of a list of acceptable medical colleges.

The sectarian medical colleges alleged prejudice in their being largerly omitted from this list. A similar study was then made by the Carnegie Foundation for the Advancement of Teaching, an organization with no medical relations, which could not be charged with prejudice. It confirmed, and in some cases emphasized, the findings of the committee of the American Medical Association.

As long as the Cleveland Homeopathic Medical College was compared only with other homeopathic institutions, its standing was relatively high; in fact it was one of the best of them. However, when it came to be compared with all medical colleges, including those regular medical colleges that had led the advance begun in the 'eighties, the Cleveland institution had a low rating.

After the surveys of medical education, further improvements were proposed to become effective in the near future. These included further advance of preliminary education, a minimum schedule of facilities and equipment, and maintenance of a minimum number of well-trained, salaried teachers giving all their time and effort to educational procedures. This was the beginning of putting medical teaching, especially in the fundamental subjects, on a professional educational basis instead of making it a pastime of medical practice. These innovations much increased the cost of conducting a medical college and at the same time diminished enrollment by restricting entrance to those with a fair preliminary education. Institutions with no resources except student fees were in a dilemma.

In the course of the surveys some of the weakest medical colleges were advised to close in order to reduce the excessive number then in operation. Others were advised to merge with some neighboring medical college. It was advised of this latter category which brought the consolidation of Pulte Medical

College, existent since 1872 in Cincinnati, with the institution in Cleveland.

Both of these medical colleges had a low rating in the first complete classification issued in June 1910. Omission from the list of acceptable colleges was the cause of the rapid decrease in attendance after 1900 in the Cleveland Homeopathic Medical College. When the consolidation occurred it did not give enough additional resources to keep pace with the announced advancing improvements, and the rating of the combined institution was not improved. The Cleveland-Pulte Medical College publicly promised improvements which were impossible for it to attain. It was soon evident that with limited resources it could not meet the proposed program. It struggled for four years, attendance constantly diminishing until it finally closed at the end of the session of 1913-14, ending institutional homeopathic medical education in Cleveland after sixty-four years of continuous existence.

A complete table of graduates of all the homeopathic medical colleges in Cleveland has not been published nor is a complete file of their catalogues available. The catalogue of the Cleveland Homeopathic Medical College published in May 1900 carries a list said to contain the names of all graduates of all homeopathic medical colleges in Cleveland through 1899. Assuming that this list is complete, and with the addition to this list of the number of graduates from 1900 to 1914 inclusive, secured from current catalogues and other sources, a total figure is reached of 2,126 graduates in course from 1851 to 1914 inclusive. The largest class for which record has been found was fifty in 1880; the smallest class was five in 1910. In addition sixty men received an honorary or an *ad eundem* degree of Doctor of Medicine, nearly all them before 1880.

The Ohio State University organized a homeopathic medical department in 1914, to which was transferred the students and movable equipment of the Cleveland-Pulte Medical College. This department began instruction in September 1914. The attendance was small and the department was officially discontinued in June 1922. This ended homeopathic institutional

medical education in Ohio seventy-three years after its inauguration as a single professorship in the Eclectic Medical Institute in November 1849.

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BOOK IV: SECOND HALF-CENTURY

XV

TRANSITION TO UNIVERSITY DEPARTMENT: 1893-1910

THIS CHAPTER is the story of revolutionary changes that came between the withdrawal of five professors to join the faculty of the rival regular medical college and the consolidation with the Medical Department of Ohio Wesleyan University. These seventeen years were dynamic in the history of the School of Medicine of Western Reserve University, as they were in the entire field of American medical education. During fifty years since the middle 'forties, American medicine had been seeking some way out of the slough into which its educational program had fallen between 1810 and 1840. Little by little a firmer foothold was gained until about 1890 solid ground was reached; and then, with rising tempo, the program hastened on during the next twenty years to heights of which medicine had only a glimmering vision fifty years earlier. The years from 1890 to 1910 constituted the most revolutionary score of years in American medical education in the more than three hundred years that have now passed.

The Medical Department of Western Reserve University did not follow the trend in these twenty years; it led. Some old policies were abandoned, other policies recently initiated were expanded, and new policies were adopted. The teaching staff was enlarged, the administration was improved, entrance requirements were raised, the curriculum was extended, a program of research got under way, new buildings were erected, and gifts and endowments were received.

Crises arose, one of them serious, but all were surmounted. Improvement continued each year, until in 1909 a competent judge who had recently studied every medical college in the United States gave as his opinion that only one medical school in the country was better than that of Western Reserve University.

The Council on Education of the American Medical Associa-

tion began in 1904 to publish annually a list of acceptable medical colleges. The Medical Department of Western Reserve University was constantly in that list. The first complete classification was published by this authority in June 1910.[1] In this all American medical colleges were grouped under the designation of A, B, or C. This school was in the list given the highest grade. In a revised classification published in 1912 a designation of A plus was assigned to a group of less than a dozen schools. This school was one of the few to receive this commendation.

Then in 1910 came as a climax a consolidation, already described, which made this the only regular medical school in Cleveland and united the local profession as its supporters in the further advance that was to come. In 1907 a definite endeavor began to nearly triple the endowment of the medical school. This effort reached successful conclusion a little after the chronological limits of this chapter.

Although the several features of advance in this dynamic period progressed coincidently, it is preferable to consider them in separate sections.

The End of Two Traditions

Three prominent features characterized this institution in its first forty-five years: the repetitive curriculum, the preceptorial system, and the cooperation of censors. The repetitive curriculum was replaced by a graded curriculum in 1888, an action that made both preceptors and censors inappropriate.

The effectiveness of the preceptorial system declined after the Civil War. Introduction of the. optional spring term in the early 'seventies afforded recitations under better teachers and clinical instruction with wider variety of material than were available when the student had depended solely upon his preceptor for these features of his education. The number of students attending the optional term steadily increased, and these students had less than three consecutive months in the year to spend with their preceptors—which they usually passed in desultory visits to patients with their preceptors, who offered no systematic course of instruction.

However, tradition required that every medical student have a preceptor. The preceptors were little more than nominal in many cases. An entering student frequently brought a letter of introduction from his family physician, who was recorded as a preceptor although he had given no systematic instruction to the student. Such students as could name no preceptor were assigned to members of the medical faculty, who did little more than give occasional advice. In a few instances "the medical faculty" appears as the preceptor, an absurdity because the chief virtue of the preceptorial system was the intimate relation of a student to one practicing physician.

The preceptorial system in this medical college declined rapidly in the 'eighties and became inharmonious when the graded curriculum became operative in 1888. However, the names of preceptors continued to be printed in the catalogues. The faculty voted in 1893 to make the formerly optional spring term a requirement to be included in the regular session; thus all students were required to attend the medical college from September to late May. This became operative for the session of 1894-95 and the names of preceptors ceased then to appear in the catalogue. The second traditional feature of earlier medical education, after a prolonged decline, had finally expired in this institution.

The reasons for appointment of five censors as officers in 1844 have been explained in chapter V. The rival regular medical college founded in Cleveland in 1864 appointed nine censors, a number equal to the number of its trustees. The Medical Department of Western Reserve College promptly increased the number of its censors to the number of its trustees, which was thirteen. The rival institution, not to be outdone, appointed thirteen censors. This was the number in each college when the medical faculties united in 1881 and the two Boards of Censors were combined, making a total of twenty-six censors, a number greater than either the number of trustees or the number of members of the teaching staff.

The men chosen for censors had been those who had served as preceptors for a considerable number of students. The de-

cline of the preceptorial system resulted in fewer students for these preceptors, and they soon lost interest in their function as censors. The president of Western Reserve University wrote in 1890 that the Board of Censors of the medical department had not convened in the preceding five years.[2] This rebuke brought a temporary revival of activity of the censors, and a few new censors were elected to fill vacancies. The last new censor was elected in 1890.

The list of censors had continued to be printed in the catalogues in spite of their inactivity: indeed, some names were printed for two years after the death of the censors named. This continuance of the Board of Censors, which was nearly inactive, was due to the fact that medical societies were accustomed to grant licenses to practice medicine—without examination—to the graduates of any medical college having a Board of Censors. This was called "endorsing the diploma."

A law was enacted in 1881 authorizing an Ohio State Board of Medical Examination and Registration. This board issued state licenses for practice both by "endorsing diplomas" and by examination of men who held no medical diploma. A state license was more desirable than a county license issued by a county medical society.

The faculty of this institution in 1893 discussed abolition of the Board of Censors, without taking definite action. It had become apparent that the fact that a medical college had a Board of Censors did not guarantee the quality of its graduates. Therefore the law was amended in 1896 to require examinations for a state license of both medical graduates and non-graduates. This meant the end of county licenses and of the last excuse for maintaining a Board of Censors. The catalogue printed in March 1898, for the first time omitted the list of censors. Thus disappeared in this institution, after fifty-five years, the last of the three characteristic features of its early years. The old order was ended.

Sixty-nine different individuals were named as censors between 1843 and 1890. The length of individual occupancy of the post of censor varied from one to forty-two years; the average

was ten years. The selection of mature and experienced physicians prevailed. Vital statistics found for sixty-three of these men show that the average age at time of first appointment as a censor was forty-nine years, with a few who were less than thirty-eight years of age.

One censor appointed in the early years had never attended a medical college, but was a physician of wide reputation in both preceptorial teaching and practice. Another appointed some time later had attended only one session at a medical college, and therefore had no medical degree. The sixty-seven other censors held degrees representing twenty different medical colleges. Nineteen of them held a degree from the Medical Department of Western Reserve College. Ten of the number had been graduated at a college of arts and fifteen more had attended such a college. Two of these censors were at some time trustees of Western Reserve College or University. Five were presidents of the Ohio State Medical Society. One was a member of Congress, and several were members of state legislatures or held other elective civil offices. Altogether they were capable and mature physicians and leaders in their respective communities.

Extension of the Course

The years from 1893 to 1910 was a period of great advance in American medicine in the amount of instruction given a young man before he was considered fitted for independent practice. The length of the session had been twenty-four weeks in this medical college since 1878, supplemented by an optional spring term of twelve weeks. The spring term had increasingly attracted the better students but not the less able men who most needed it. Proposal was made in 1892 that the spring term be added to the required session. Some of the older professors opposed this. A compromise was passed in January 1893 by a majority of one vote. This postponed beginning of the longer session until 1895-96, and then the action was qualified so as not to apply to students who had matriculated prior

to 1895. The schedule of the longer session was set to begin the middle of September and end the middle of May.

Those who opposed early action in January 1893 were the five men of the Wooster group who resigned in September 1893. The reorganized faculty reconsidered the question in November 1893 and advanced the beginning of the longer session to 1894-95, to be required of all students. The session included a recess of two weeks at the end of December and therefore gave thirty weeks of instruction.

The longer session had not yet become operative when the faculty began to discuss increase of the number of sessions required to be attended before receiving the medical degree. The Association of American Medical Colleges had recently recommended that all member medical colleges require attendance at four sessions at some time in the near future. The first action in the Reserve medical faculty was in March 1894, and on May 4 a motion was passed with two dissenting votes, to require attendance at four sessions of the class to enter in September 1895 and thereafter. Unanimity was desirable in such a major change, and two weeks later the question was reconsidered with unanimous decision to set the date of requirement in September 1896 but to offer an optional four-year curriculum in 1895-96. No evidence has been found that any student who entered in 1895 at that time chose this option. This medical college was the first in Ohio and the eleventh out of 170 in the United States to adopt the four-year course.[3]

The class entering in 1895 under the three-year curriculum would be graduated in 1898, while the class entering in 1896 under the four-year course would not be graduated until 1900. Apparently there would be no graduates in 1899. However, five men were graduated in 1899, all of whom entered in 1895 and were listed with the class of 1898 in three catalogues. Three of these men entered the army in the Spanish War and were absent for a part of two sessions. Another had a long illness in term time. The fifth man was an instructor in a laboratory course in the college of arts and so could not attend all of the medical instruction in any session. Therefore

these five graduates of 1899 all represent delayed graduation rather than students in the optional four-year course.

The thirty weeks of instruction established for the session of 1894-95 were extended to thirty-two weeks of instruction in 1906-07. The requirement for the degree in 1893-94 was three sessions of twenty-four weeks each, a total of seventy-two weeks. The requirement in 1906-07 was four sessions of thirty-two weeks each, a total of one hundred and twenty-eight weeks. The number of weeks required to earn the medical degree had been increased by seventy-seven per cent in twelve years. When to this is added the fact that in 1893 only a few of the graduates took an interneship of a year in a hospital, while in 1910 all graduates of this medical school did this, it appears that the graduate of 1910 before entering practice had two and a half times as many weeks of instruction and experience under guidance as had most of the graduates of 1893.

Increase of Clinical Facilities

The clinical facilities were of two types, hospitals and dispensaries. This medical school in 1893-94 controlled all the teaching privileges of Charity Hospital and its associated Maternity Home, with a total of nearly one hundred beds, and of Lakeside Hospital with seventy beds, both throughout the year. It had the teaching privileges af City Hospital with 175 beds during four months of the teaching session. This gave an average through the session of about 260 beds.

The new Lakeside Hospital, occupied in 1898, and structural additions at Charity and City hospitals more than doubled the clinical field in 1898-99. In 1901 an affiliation was made with St. Alexis Hospital which was used in the months when the teaching privileges at City Hospital were under control of faculties of other local medical colleges. All of these hospitals continued to increase in capacity until by 1909-10 over 1,200 beds were available for clinical teaching, nearly five times as many as in 1893-94.

The only dispensary service in 1893-94 was the college dispensary located in the medical school building. A dispensary

was organized at Charity Hospital in 1894. The total dispensary service in 1893-94 was 5,000 patients with 20,000 visits each year.[4] The college dispensary was moved to new and enlarged quarters at Lakeside Hospital about January 1, 1898. New dispensaries were organized in the special fields of obstetrics, pediatrics, and tuberculosis in 1903 and 1904.

The growth of dispensary service was such that before 1912 the attendance was 25,000 annual patients with 100,000 visits.[5] Therefore in both hospitals and dispensaries the clinical teaching field of this medical school was nearly five times as great in 1910 as in 1893.

The increase of hospital capacity had a secondary result. Nearly all graduates immediately entered practice in 1893; few took a hospital interneship. Ten years later all but one or two graduates in each class spent at least a year in a hospital before entering practice, and in 1910 every graduate took an internship.

The extension of the course and the larger clinical field improved the teaching in the clinical subjects in these seventeen years fully as much as it was improved in the medical sciences. With the addition of more preliminary education and hospital interneships, the graduates of the later years considered in this chapter had far better equipment to enter private practice.

Development of the Curriculum

Required laboratory courses had been begun in 1888 in chemistry, histology, and physiology. Records in 1890 show suggestions of establishment of laboratory courses in bacteriology, pathology, pharmacy, and pharmacology, but the teaching in these subjects contained only demonstrations until 1894.

The removal of dissension by resignations of five professors in September 1893, only three weeks before the opening of the session, did not give time to change the announced curriculum for 1893-94. During that year plans were made, and at the beginning of 1894-95 Dr. William T. Howard, Jr., established and equipped a laboratory and began a laboratory course of sixty hours in bacteriology in the freshman year and one of

112 hours in pathology in the second year. The instruction in these two subjects had more than doubled before 1903-04, when both subjects were taught in the second year. The amount of instruction in these two subjects had reached nearly four hundred hours by 1910.

Dr. John George Spenzer, who was graduated in medicine by this school in 1884, and who received the degree of Doctor of Philosophy from the University of Strassburg in 1893, was appointed Instructor in Pharmacology and Experimental Therapeutics, and in 1894-95 he began a course, which included thirty hours of laboratory work, to second-year students in a newly established laboratory. A considerable expansion of the laboratory work was announced for the four-year course which was to begin in 1896. However, Dr. Spenzer resigned at the end of the session of 1895-96 and the proposed expansion did not become effective. A new instructor carried on part of the former teaching during the years 1896 to 1898.

Dr. Torald Hermann Sollmann re-established the laboratory of pharmacy and pharmacology in 1898 with the title of a lecturer. In 1898-99 he gave a course of thirty hours in pharmacy in the first year and a course of 128 hours in pharmacology in the second year, half of it laboratory work. This was the effective beginning of a department which absorbed the teaching of materia medica and therapeutics and was giving three hundred hours of instruction before 1909-10.

Laboratory courses revealed the deficiency of knowledge of biology and physics in the students who had no more than high school education. Few high schools of that era had laboratory courses in either biology or physics. The four-year course permitted introduction of new subjects, and courses in the first year in biology and physics were begun in 1896-97. These were given in the laboratories of the college of arts. Each course occupied one afternoon each week for one semester, and included laboratory work. This plan continued four years, until difficulties of schedule brought abandonment of the course in physics and substitution for the course in biology of a course in comparative anatomy given by a demonstrator of anatomy at

the medical school building. This course was first given in 1900-01, and the next year was taken over by the new department of histology and embryology and continued through 1908-09.

Two independent laboratories were established in 1901, coincident with the beginning of college entrance requirements. A clinical laboratory was established at Lakeside Hospital and equipped for class teaching. Dr. Louis William Ladd, a graduate in arts of Yale University, and in medicine of the Johns Hopkins University in 1899, was appointed Lecturer in Clinical Microscopy in 1901 and organized a systematic course of 128 hours given to third year students and supplemented by group instruction in the senior year. This was an effective course ably taught by Dr. Ladd for twenty years. He was an associate professor after 1916.

A separate department and laboratory of histology and embryology was established by Dr. Frederick Clayton Waite in 1901. This took over the teaching of histology, which had been combined with physiology for seven years, and the teaching of comparative anatomy, which had been carried at the medical school for one year. The total instruction in these two subjects in 1900-01 had been 195 hours. Also a laboratory course in embryology was introduced, a subject not previously taught in this medical school. The total amount of instruction in these three courses in the freshman year in 1901-02 was 330 hours, eighty per cent of it laboratory work.

The students with college preparation had taken inorganic chemistry before entering the medical course. Therefore in 1901-02 the chemistry course was reorganized, omitting systematic inorganic chemistry and increasing the attention to organic chemistry and physiological chemistry. Further reorganization came in 1903 when the professorship of chemistry was abolished and this subject was combined with physiology. Two courses were given in the freshman year, one in organic chemistry and the other in biochemistry, with a total of 252 hours, a large reduction from the nearly four hundred hours given to chemistry in 1900-01.

In 1893-94 the total amount of laboratory work in all sub-

jects of the course except dissection, which was not scheduled, was 288 hours. The comparative figure in 1909-10 was 1,184 hours, in addition to 296 hours scheduled for dissection.

This marked development of laboratory instruction in the curriculum was correlated with the fact that in 1893-94 laboratory teaching was only adolescent. The clinical subjects also developed in response to a longer course and extension of clinical facilities. A few of the important innovations can be mentioned.

Attention to physical diagnosis was increased. Chemical and microscopical aids in diagnosis increased the accuracy of the study of patients. Medical clinics, traditionally given in the amphitheatre, were in part replaced by bedside clinics given in the wards to students in small groups. Senior students were assigned to intensive study of a few cases at the bedside, with taking of case histories, laboratory aid in diagnosis, and writing of detailed reports, including consultation of the medical literature, both textbooks and current journals.

A course in operative surgery on the cadaver had been given throughout the history of the institution. The new laboratory of experimental medicine contained operating rooms and facilities for care of animals. A course in surgical technique was organized in 1908 by Dr. Charles Edwin Briggs, a graduate in arts of Oberlin College and in medicine of Harvard Medical School in 1897. He had been on the teaching staff for eight years when appointed Lecturer on Operative Surgery and Surgical Technique in 1907. Students did operations on animals in this course under the same aseptic precautions used in surgical practice, and carried the animals through to recovery. Dr. Briggs was promoted until he became an associate professor in 1912 and gave this popular and efficient course for fifteen years.

The student in the 'nineties saw a few obstetrical cases in the hospital, and on rare occasions assisted in an out-patient case. The out-patient clinic was much extended, and before 1910 each senior student was required to attend and assist in at least eight cases outside the hospitals. The dispensary teaching was extended and improved in all subjects.

Additions had been made to the time given to various subjects

since 1901. This was done piecemeal by separate actions. The result was that the curriculum had become overloaded with a total of nearly 4,800 hours; it was unbalanced, and it contained many incongruities of sequence of subjects. It was apparent that the remedy was a study of the entire curriculum and its reorganization. A committee of seven members of the faculty, under chairmanship of Dr. Dudley P. Allen, was appointed in 1908 to revise the curriculum. Nearly a year of intensive work followed, and a curriculum was reported and adopted in 1909 organizing the curriculum under seven departments and reducing the courses to a total of a little more than 4,100 hours with much improvement in sequence and balance. This became effective in 1909-10.[6] The entire curriculum improved as much between 1893 and 1910 as did the general education of the students admitted to the medical school.

The catalogues of all medical colleges at the end of the nineteenth century were unsatisfactory to one seeking detailed information. They had failed to follow the improvement that began about 1880 in the catalogues of colleges of arts.

The form of the catalogue of the Medical Department of Western Reserve University was better than that of many other medical colleges. However, it was found that prospective students, accustomed to the better catalogues of colleges of arts, failed to get from the catalogue a full appreciation of the facilities of the medical school.

A committee of the faculty was appointed in September 1906 to revise the catalogue. Dr. Waite, its chairman, spent much time for five months in consulting catalogues of colleges of arts and of medical schools to discover favorable features. The first catalogue in its new form was issued in March 1907. It contained 144 pages, compared to fifty-six pages in the catalogue of the previous year. The plan of the better catalogues of colleges of arts formed its basis. Detailed information was given in orderly form, and a table of contents inserted.

This new form brought favorable comment by administrators in other medical schools, and soon influenced the cata-

logues which they issued. The form of the Reserve medical catalogue was an apparent influence in the catalogues of the majority of medical schools within the next ten years, and later influenced the catalogues of dental schools.

The general library of this institution did not enjoy much growth in its first half century. A handsome and large room in the building occupied in 1887 was marked for use of the library. The students of the 'nineties used the library only slightly, and the general library of the medical school was not kept up to date.

The Cleveland Medical Library was organized by physicians as a separate corporation in 1894. It soon occupied a former residence and began to accumulate modern books and files of journals. A student in any local medical college could secure reading privileges for a moderate annual fee. The medical school soon paid a reduced fee for each senior and later a lump sum for reading privileges for all students.

Each of the laboratories began a small departmental library in the 'nineties. Some time before 1901 the books in the general library of the medical school were distributed to the several laboratories as far as they could be used and the remainder were deposited in the Cleveland Medical Library. The medical school has had no central library since that time. The departmental libraries have grown and are located separately in rooms occupied by the several departments.

New Accessory Buildings and Laboratories

The inauguration of laboratory courses in bacteriology and pathology and in pharmacy and pharmacology in 1894 brought crowded conditions in the medical building. The proposed extension of the curriculum to four years in 1896 would require more space. The faculty in July 1894 asked that the dental department, which had occupied the top floor since 1892, vacate its space. Half of it was released in the summer of 1894, the remainder in 1896. Plans were under way for establishment of other laboratories in the near future.

a. The Chemical-Physiological Building

The department of chemistry occupied more space in the medical building than did any other department. Moreover, laboratory teaching of chemistry entailed a danger of fire in a building with wooden floors. It seemed best to move chemistry because of these reasons. This decision was reached in January 1896, and in May 1896 the dean reported progress toward securing additional land for a building for chemistry.

Gifts to the amount of nearly $27,000 were received in the spring of 1896 to purchase land and erect a new building. An additional frontage of fifty-eight feet was purchased on Erie Street directly south of the medical building and extending as far eastward as did the medical college lot; building plans were approved in June 1896. The estimate of cost was more than the money available. The plans had to be extensively revised, and were finally approved in March 1897. The plan to have the building ready for the opening of the session of 1897-98 was frustrated by this delay, and building operations did not begin until the summer of 1897. The building was completed and first used for instruction in 1898.

The size of the building was fifty-four by forty-six feet, three stories in height, and as nearly fire-proof as possible. The total cost of land and building was $29,581. The second and third floors contained laboratories, but there was no lecture room in the building and an overhead passageway was constructed to connect the second floor with the second floor of the medical building so that the old chemical lecture room could be used. After 1903 this new building was known as the physiological laboratory. The removal of chemistry from the main building in 1898 gave more room for physiology and a separate room for a histological laboratory.

b. The Laboratory of Clinical Microscopy

A teaching position in clinical microscopy was established in 1901. This development arose in connection with extension of microscopical methods of diagnosis in medicine and surgery

at Lakeside Hospital. A third story was added to the pathological building there, in which was installed a teaching laboratory. The building belonged to the hospital and the cost was not paid by the university. However, this new laboratory was used for teaching medical students in clinical microscopy after 1901, and in pathology after 1912, until 1924.

c. The H. K. Cushing Laboratory of Experimental Medicine

The founding of a department of experimental medicine in 1906, to be presently described, involved erection of a new laboratory building for its use. The donors requested that it be named in honor of Dr. Henry Kirke Cushing, a former professor in the medical school and more recently a trustee of the university.

The original plan was to erect this building on the grounds of Lakeside Hospital where ample room with good light was available. This plan was changed and the building was located on a small vacant space of the lot already occupied by two medical buildings. This area was at the back corner of the lot bordering a narrow alley and was surrounded on all sides by taller buildings. Its south wall abutted the wall of a commercial building. The choice of location was unfortunate and resulted in lack of adequate natural light, further restricted by use of partially opaque wire glass windows throughout. Artificial light was needed on the brightest days.

The building was erected in the summer of 1908, on a ground area of fifty-five by forty feet, so small that the structure was extended upward for five stories, the top story being used for animal paddocks on an open roof. The expectation that clinical men would use the building for research led to the designing of many small rooms. One room forty by twenty-six feet was planned for instruction of students in an optional course and was the only room of adequate size in the building. It was little used.

Several records of the cost of the building give $40,000; one record says $30,000. The building was first used in the fall of 1908 and was dedicated November 20, 1908. Dr. William H.

Welch, Professor of Pathology in the Johns Hopkins University, gave the address. He congratulated the institution on the acquisition of this new feature of American medical schools, and predicted that work done in it would advance the science of medicine.

The Department of Experimental Medicine

A new venture in American medical education, the establishment of a department of experimental medicine, arose from a stimulus that was largely personal. No such department existed in any medical school in the United States when this innovation at Western Reserve University was planned in 1906. The endeavor was initiated by Dr. William T. Howard, Jr., Professor of Pathology and Bacteriology. In this plan he secured the interest of Dr. Edward F. Cushing, Professor of Pediatrics, who was the leader in securing money to establish a new independent department.

Mr. Howard M. Hanna, a trustee, and Col. Oliver H. Payne, a former resident of Cleveland, gave each $100,000 of which $160,000 became endowment for the department. Mr. Hanna added $17,000 to the endowment in 1908 for purchasing supplies, and a further supplementary endowment of $8,500 was received in 1910.

Dr. George N. Stewart had resigned the professorship of physiology in 1903 to accept a similar appointment in another university. He had done extensive and meritorious research in physiology. His friend, Dr. Howard, evolved a plan for establishment of a research department to be attached to Lakeside Hospital, essentially a university hospital, and to recall Dr. Stewart as its director. The members of the staff of the new department were expected to do research on clinical problems in cooperation with the hospital staff; it was hoped that many clinical teachers would do independent research. A serious mistake was made in changing the location of the new laboratory to a site remote from any hospital. This decision was made largely because the chief of the medical service at the hospital did not support the plan. He doubted that a man who had never practiced medicine and who had lacked direct contact

with clinical medicine since his student days eighteen years earlier, was likely to direct research on clinical problems successfully. This staff member and the proposed professor of experimental medicine had long been close personal friends and this relation continued.

Dr. Stewart was appointed Professor of Experimental Medicine early in 1907 and given leave of absence for a year to investigate this field in Europe. He began service with the session of 1908-09. Dr. David Marine, a graduate in arts and in medicine of the Johns Hopkins University in 1905, was appointed as an instructor. He had been a demonstrator in pathology in this school during two years and had begun research on the thyroid gland. He was promoted until he became an associate professor in 1915. He was a member of the department for thirteen years and carried on research, including his work on goiter, which was the best contribution from this department in the twenty-five years of its existence.

Dr. Stewart had been highly successful in teaching physiology in this school from 1894 to 1903. He had cooperated in the faculty in many ways and his fine personality and sociability made him a favorite with his colleagues. His attitude greatly changed when he returned to his new position. He missed the stimulus of teaching and became a near recluse. The door to his rooms was kept locked and he was hard to find. His change of title did not make him clinically minded. He was still a physiologist and spent much time in revising his textbook on physiology. He held appointments on the staffs of hospitals and visited one hospital once a week but had contact with few clinical teachers. The major purpose of the establishment of the department was to stimulate the younger clinical men to research. This was accomplished to a slight degree only. A few younger men worked in the laboratory in the years from 1908 to 1915, but largely independently.

Beginning in 1915, the younger men, except members of the departmental staff, ceased to work in the laboratory. An optional course offered to senior medical students was abbreviated. The first world war accentuated the decline in activity. The senior assistant was absent in military service from 1917 to 1919 and

resigned in 1920 to go to another institution, leaving only the professor, an instructor who had been appointed in 1915, and a junior instructor on the staff. The department never recovered from the adjustments and incidents of the war period.

When the new building was occupied in 1924, experimental medicine was assigned as much space as any other laboratory department, although it was giving only twenty-four hours of instruction to senior medical students during the year and its research was restricted to that done by the professor, an associate professor and an assistant.

The amount of research that originated in the department was somewhat disappointing. The total number of publications based on research done in this department in twenty-five years was 214. The important feature of the research of the later years was a series of papers on the adrenal gland based on work done by Dr. Stewart and his assistant, mainly by the latter.

Dr. Stewart was ill after 1927 and died in May 1930, a few months before he would have reached the age of retirement. The faculty did not consider it wise to appoint a successor in the professorship. The catalogue issued in December 1931 states that the laboratory had been moved to Lakeside Hospital under the direction of the professor of medicine. The library, equipment and endowment were absorbed by the department of medicine. The single assistant remaining after the death of Dr. Stewart was retained until the term of his appointment expired in 1933, and then was not reappointed.

The venture was valid in its conception. The department had reasonably adequate endowment and equipment. Its failure to reach the expectations of its sponsors caused much disappointment. No single cause can be assigned for its failure. Lack of close hospital affiliation, both physical and professional, with conflict of ideas on methods of a program of research in clinical subjects, contributed to the lack of progress.

Increased Requirement of Preliminary Education

Many have held that the action of the faculty and trustees in their decision in January 1898 greatly to increase the en-

trance requirements—which became effective in 1901—was the most important single action in the second half-century of this institution. The preliminary education required for entrance to the Medical Department of Western Reserve University had been since 1888 essentially graduation from a high school or the equivalent as established by examination. The Johns Hopkins Medical School had opened in 1893 with the requirement of graduation from a college of arts or science for entrance; and in 1896 Harvard Medical School had announced that it would make the same requirement beginning in 1900.

The leaders in the medical school in Cleveland wished to make their institution as good as any in the country. The actions at the Hopkins and Harvard were a challenge. Dr. John P. Sawyer deserves the credit for initiating advance in entrance requirements. The number of college graduates had steadily increased in the entering classes of the past fifteen years. Twenty per cent of the new men in several classes had been college graduates and in the first class entering the four-year curriculum in 1896 the percentage was over thirty.

Dr. Sawyer, early in 1897, examined the lists of students in many current medical college catalogues to determine how many graduates of Ohio colleges of arts and how many residents of Ohio who were college graduates were enrolled as medical students in various medical colleges. He prepared charts showing this information which he presented to the faculty with the argument that if a medical school in Ohio restricted its students to college graduates it would attract college men with Ohio relations who were entering other medical colleges. He believed that this attraction would bring enough students to tide over the critical years, if the Reserve medical school adopted this new policy.

Thirteen of the nineteen professors on the faculty in 1897 had been graduated in arts before taking their professional course, and three more had attended part of the course of a college of arts or science. They knew the value of adequate preliminary education.

The faculty had notified the trustees in 1894 that additional

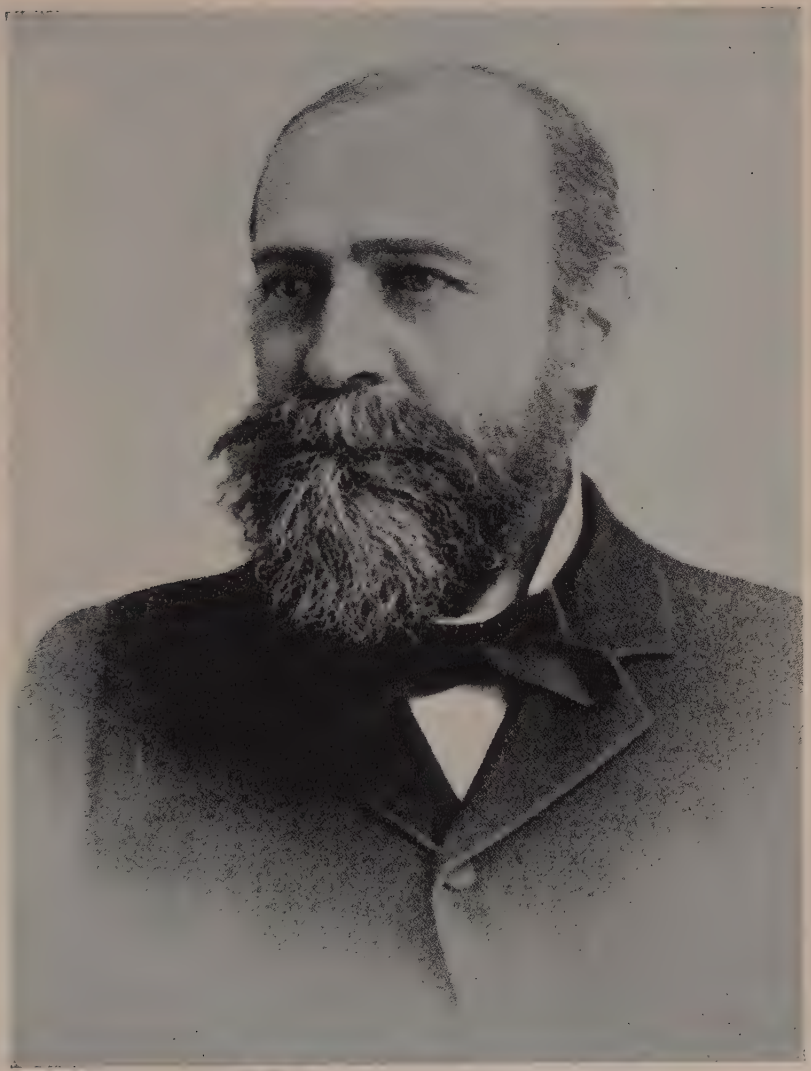
endowment of at least $250,000 was needed to develop the new policies of full-time teachers and research. No additional endowment had been received. It was hoped that if the medical school took a position of outstanding advancement, such action would bring the needed endowment.

The medical faculty on May 28, 1897 adopted the following resolution: "Voted: that if the trustees guarantee this faculty support in case of a deficit, this faculty will advance the standard of medical education in this college to a degree equal to the best medical colleges of the country."

Dr. Sawyer and Dr. Millikin were named a committee to present the subject to the trustees and they appeared before a special meeting of the executive committee of the trustees within a few days, on which occasion Dr. Sawyer presented his charts and his argument. The executive committee favored the plan, which was presented to the entire Board of Trustees at their June meeting in 1897.

President Thwing at this time recommended ". . . to the Board of Trustees the consideration of the question that at a certain specified time in the future the Medical College should not admit to its classes any person who is not qualified to enter the Senior Year of Adelbert College. Such an increase of requirements would be full of significance. The most significant fact would be possibly cutting down in number of students. But such diminution, I am sure, would prove to be only temporary."[7]

The preliminary plan was to require for entrance a degree from a college of arts or science, as was being done at Hopkins and as had been announced at Harvard. However, since 1894 an agreement had existed between the faculties of the college of arts and of medicine in the university that permitted seniors in the college of arts to choose part of their electives from subjects taught under the medical faculty, with registration under both faculties. This concession by the faculty of the college of arts was secured by Dr. John P. Sawyer, himself an alumnus of that college of arts who knew its professors. These men were thus able to graduate in medicine one year earlier than they



Isaac Newton Himes, Professor, 1864-65, 1871-1895; Dean, 1893 to 1895

could do if they were not admitted to the medical course until after graduation in arts. This plan had been followed by a number of students each year, and was favored. Therefore came a decision to require for entrance the completion of three years of a course in arts or science.

Several of the trustees expressed individual approval of the higher entrance requirements, and on October 1, 1897 the faculty reaffirmed its opinion expressed in May by a resolution: "Voted; that it is the sense of this faculty that the requirements for entrance should be advanced provided funds can be had in case of a deficit from a loss of students' fees by lessened attendance on account of advanced requirement." Two weeks later, on October 15, the following more specific resolution was passed: "Voted; that the faculty recommend to the Board of Trustees that beginning with the school year of 1902 the standard of admission to the course in this college be made the completion of the Junior year in some recognized college, provided the trustees guarantee the necessary funds for the maintenance of this college to its present status in case the receipts from students decrease by reason of the advanced requirements to enter, and at the same time the faculty expresses to the trustees their preference that the advanced requirements should be made operative in 1901 instead of 1902, if the trustees shall think this advisable." The trustees at a meeting in January 1898 approved the earlier date resulting in a resolution of the faculty on January 31, 1898: "Voted; that beginning with the school year 1901-02 the requirements for admission to the course in this college shall be such knowledge and training as are embodied in the first three years of a college course." This was officially announced in the catalogue published in March 1898.

Three modifications regarding entrance that came in later years merit mention. The arrangement by which a group of seniors in the undergraduate college took part of their instruction there and part of it as first year students in the medical school caused difficulties in arranging schedules in both faculties. Also the quality of the courses in the medical school had improved since the original arrangement made in 1894. Fur-

thermore it was desired to approach other colleges of arts asking them to permit their seniors to come to the medical school and accept the first year of the medical course as the final year for their degree in arts or science. Such a request was unlikely to succeed as long as Western Reserve University did not permit the seniors in its college of arts to do this. In 1906 Dr. Sawyer, Dr. Howard, and Dr. Waite were named a committee "on relation to literary colleges." This committee, after showing the cultural and educational value of all courses of the first year of the medical curriculum, secured the privilege allowing the seniors in the college of arts of Western Reserve University to take all their work in the medical school. The same arrangement was made with an increasing number of colleges of arts outside Cleveland in following years.

Several colleges of arts in Ohio and in adjacent states began before 1900 to give the work of the first medical year, including human anatomy. Usually they had only one graduate in medicine on their teaching staff, a local physician. Graduates of such colleges who had taken the medical work were admitted to the second year of the Medical Department of Western Reserve University until 1906, when such advanced standing was discontinued.

Most of the students entering in 1901 and thereafter were either graduates of a college of arts or had arrangements with their colleges by which they received a degree after one year in the medical college. However, about fifteen per cent of these men did not get a degree in arts or science from the college of arts which they had attended for three years. Investigation of these cases showed that many of these men might have received a degree in arts if they had employed a little foresight or perhaps had done some work in a summer session. The future advantage of an arts degree for all physicians was appreciated by the faculty, if not by some of the students. Therefore in May 1908 the entrance requirements were further advanced to include a condition that no man would be admitted unless he already held a degree or had a definite arrangement to secure it before entering the third year of the medical course.

The customary notice of one year was given and this condition became operative with the class entering in 1909. All graduates of the class of 1913 and thereafter in this school have held a degree in arts or science.

Attendance of Students

The enrolment in these seventeen years (Appendix H) was influenced by successive factors. The entrance requirements were made more rigorous and interpretation of credentials more severe in 1894, causing refusal of many applicants for entrance. The attendance in 1893-94 was forty per cent less than in the preceding session, doubtless the result of general knowledge of the dissension in the faculty and the resignation of five well-known professors in 1893.

The loss was partially regained in 1894-95. A class larger than normal entered in 1895 and again in 1900, both being years preceding extension of the requirements for graduation. The average attendance in the eight years from 1893-94 to 1900-01 inclusive was one hundred and twenty students. In contrast the average attendance from 1901-02, when the college entrance requirements began, until 1909-10, was ninety-three students.

The trustees and faculty had foreseen a large decrease in entering classes with the beginning of higher entrance requirements, but they believed that recovery would come in one or two years, and that the larger classes that had entered in preceding years would maintain the total enrolment above one hundred until recovery in size of entering classes came.

In 1898 an illustrated circular announcing the requirements was prepared and sent to 20,000 teachers and students in colleges of arts. The edition of the catalogue was increased and sent to college juniors and seniors early in 1901. The average number of college graduates entering during five past years had been eight. It was believed that the extensive advertising would bring enough additional applicants to make an entering class of twenty-five men in 1901. The close of registration in September 1901 gave only twelve first-year students, a disappointment

somewhat allayed by the conviction that many more would enter the next year. Only thirteen entered in 1902 and the total enrolment dropped to ninety-six, below the expected minimum. Hope of increased entrance in another year persisted, unrealized when only eleven entered in 1903, and the total enrolment dropped to eighty-one, half of them seniors.

It was evident that with the graduation of the senior class in June 1904, the total enrolment in 1904-05 would be less than fifty unless something could be done to stimulate entrance. The expected response to higher standards had not come, and members of the faculty were despondent. One prominent full-time professor resigned to accept a position in another medical school that had lower standards but more students, and other teachers were likely to accept any similar opportunity.

The trustees, who had made plans to support a school with not fewer than one hundred students, hesitated to try to maintain an institution that would apparently soon have fewer than fifty students, and several trustees proposed that the college entrance requirements be abandoned with a retreat to high school graduation, which was the requirement for entrance in all other medical schools of the Middle West.

Various explanations were given for the failure of response to higher standards, but no one could suggest an effective remedy. The president called in members of the faculty for conference, among them one full-time teacher who was not a physician and who offered an explanation not previously suggested.

The number of graduate schools at this time was small and mostly connected with eastern universities. A large number of the teachers of science in colleges of arts in the Middle West had attended these eastern graduate schools and were advising their students who contemplated medical study to go to the eastern medical schools connected with universities with which these teachers were familiar. A college student in selecting a professional school is much influenced by the advice of his teachers.

This teacher on the Reserve medical faculty—Dr. Waite—believed it necessary to convince the teachers in colleges of arts

of the excellence of a particular medical school before it could be expected that they would advise their students to attend that school. He said that he believed he could increase the number of entering students because he was personally acquainted with a large number of teachers of biology in colleges of arts. The sending of circulars had given no apparent effect and personal letters were believed to be less effective than interviews.

The president and dean arranged for Dr. Waite to visit colleges. His teaching schedule was adjusted so that he could be absent for periods of two weeks. He began a series of trips in November 1903 and before May 1904 had visited over a hundred colleges of arts from New England to the Rocky Mountains. He interviewed by appointment the teachers of biology and chemistry in each college, outlining the advantages of the Medical Department of Western Reserve University, and he secured introductions to prospective medical students with permission to have conferences with these students. Prospective students who resided in Ohio were again visited at their homes during the summer of 1904. The entering class in 1904 was twenty-seven in contrast to eleven in 1903, and the total enrolment was seventy-four instead of the threatened less than fifty. The report of the dean in June 1905 said: "The increase in the number of students entering the first year . . . is marked and extremely gratifying. . . ."[8]

Several medical schools were giving only the first two years of the medical course. All of these in the area mentioned and one beyond the Rocky Mountains, were visited, and as a result several students came from them to enter the small upper classes. This resulted in the number of graduates in every class during several years being equal to or greater than the number that entered the class in the first year.

This procedure was continued for four years until the total enrolment rose above the basic point of one hundred students. The visits were limited to colleges within three hundred miles of Cleveland after the first year, requiring less absence of Dr. Waite from his duties in Cleveland. No college was visited that

was a department of a university having its own medical college giving a complete course.

The visiting of colleges not only increased the enrolment but extended the acquaintance with the medical school and brought students from a wider area. In the enrolments from 1893 to 1905 the average number of students who resided outside Ohio was fourteen per cent. This figure passed twenty-five per cent for the first time in 1905-06, and the percentage rose to thirty in 1907-08.

Few except the officers knew of the discouragement of the trustees and the precarious position of the school in 1903-04. The larger entering class in 1904 encouraged the trustees and nothing more was heard of retreat from higher standards. The total enrolment of over one hundred in 1907-08 brought conviction that the danger point had been passed, and with renewed enthusiasm the trustees and faculty began to plan for further advance. Many forward steps came in the three years beginning with the session of 1907-08.

Changes in Administration

In the seventeen years considered in this chapter three different deans served and increasing attention was given to administration. Whether this was a cause or result, it was related to the dynamic activity of this period. The faculty had elected all of its officers during fifty years without asking confirmation by the trustees. The trustees had elected the deans in other departments of the university after Dr. Thwing came to the presidency in 1890. When Dr. Weber resigned as dean in September 1893, the trustees elected Dr. Isaac N. Himes to that office without consulting the medical faculty. Thus the medical deanship passed from control of the faculty to control of the trustees, and since 1893 the trustees elected all the deans of the School of Medicine until 1928 without asking nominations by the faculty. However, the president had usually informally consulted some of the medical professors before a dean was elected. The dean has become essentially a deputy of the president.

Dr. Himes, then fifty-nine years of age, was the logical choice

for the office. He referred to himself as acting dean for more than a year. This indicates that he did not consider his occupancy of the office permanent. His probable reason was that he was aware of a progressive disease of the heart of which his colleagues did not know. This caused his sudden and unexpected death from coronary occlusion on April 1, 1895, after having been dean for less than nineteen months. The major facts of his career are summarized in chapter XVIII.

The trustees elected a successor within two weeks. Dr. Hunter Holmes Powell, then fifty-one years of age, was chosen. His past record did not indicate that he was likely to be enthusiastic in leading the advance upon which the institution had already entered. Less than a year before he was elected dean, he had voted against increasing the course to four years.

The faculty appointed two members of the faculty as advisers to the new dean and the three were organized as a committee on administration. The chairman of this committee was Dr. John P. Sawyer, and during the next five years he led the advance of the medical school far more than did the dean.

Dr. Powell resigned his bursarial duties when he became dean. These were added to the duties of Dr. George C. Ashmun, already the secretary and registrar, together with an annual salary of $200, the first salary attached to any faculty office.

A house committee in charge of the building had existed since 1887, the chairman being one of the full-time teachers who was in the building daily during the session. A financial committee was appointed in 1896. Thus administrative duties were distributed among a dean, an administrative committee, a house committee, a financial committee, and a secretary-registrar-bursar. This diffuseness resulted in delay and sometimes in conflicting administrative actions.

The trustees established the new office of "executive officer of the medical faculty" in 1900, in order to concentrate the administrative duties. An annual salary of $1,000 was attached to this office, with the provision that the office might be held separately or jointly with the deanship. Each office was to be limited to a term of three years.

Dr. Powell notified the trustees that he did not wish to assume all these duties and resigned as dean in 1900. Dr. Benjamin Love Millikin, then forty-nine years of age, was appointed the eighth dean and the first executive officer in June 1900. He served for four terms of three years each, resigning in 1912 on account of ill health. A sketch of his career is postponed to chapter XVIII.

Dr. Allen and Dr. Millikin had joint professional offices and the office of Dr. Sawyer was near by. These two men were the close advisers of Dean Millikin through twelve years. They met frequently at lunch at a nearby club to consult on the affairs of the medical school. Thus these three men working in intimate harmony were the leaders in the twelve years from 1900 to 1912, and the leadership of Dr. Sawyer dated back to 1893. In those years the foundations of the present status of the institution were firmly laid, and whatever reputation the School of Medicine of Western Reserve University has gained should be largely credited to the service of these three men in the first nineteen years of the second half-century of the institution.

From 1843 to 1900 the office of the medical school had been open only a small fraction of the time during the session, and not at all in vacation. The officers, with one exception, for nearly sixty years had been practitioners and had come to the medical building for only short periods in each week. The necessity for better contact of students and others with the administration was recognized, and a clerk was employed in 1900 to be in the office part of each day during the session. This was only partially satisfactory, because the clerk lacked authority to make decisions even in minor matters.

Dr. Ashmun notified the faculty in June 1907 that he desired to resign as secretary-registrar, after fourteen years of excellent service under the plan then in operation. His bursarial duties had been taken over by the university treasurer before this time. Decision was made that some officer of the faculty should be in the medical building at all times throughout the session, and that one of the full-time teachers should be selected for the vacancy. Dr. Frederick C. Waite, already a member of three of the four standing committees, was elected in September 1907

as secretary-registrar with the plan that he should be in the office at least a third of the time and should have a stenographer-clerk so that the office could be open daily throughout the year.

This office assumed many of the duties of the executive officer and cared for most of the correspondence. Dr. Waite also began to repair the school's neglect of the alumni, which had been proverbial for sixty years. A card catalogue of all graduates and non-graduates was established and search started for information about them, both the living and the dead. In the next five years in this search 10,000 communications were sent out, to the majority of which answers were received. This search was pursued for many years and finally resulted in the publication of the first informational alumni catalogue of the institution in 1930.[9] No further administrative changes came in the years included in this chapter.

A New Policy of Teaching Titles

The regular teaching titles during the first fifty years were three: professor, lecturer, and demonstrator. Three extraneous titles were used, each for a short period, under conditions of emergency.

The enlarged system of titles was developed under the reorganized faculty in 1894, 1895, and 1896. The traditional three titles were extended to seven: professor, associate professor, assistant professor, lecturer, instructor, demonstrator, and assistant. All of these grades were given term appointments in 1910 except the grade of professor. The range of terms was from five years to one year.

Associate professors had a seat and vote in the faculty only when so specified at the time of appointment. Five associate professors appointed in 1896, 1903, 1904, 1908, and 1909, were designated "with a vote in the faculty." Three of them were young men in charge of laboratories recently established; two were clinical teachers at a hospital different from that to which the professor of the subject was attached. The action by which all associate professors now have a seat and vote in the faculty came in a period included in a later chapter and will be there

mentioned. Assistant professors have never had a seat or vote in the faculty. A few further changes in the system of titles will be mentioned in the next chapter.

Changes in the Teaching Staff

Several men joined the teaching staff in these seventeen years who had large influence in the second half-century. Ten who became professors in these years taught for twenty or more years and three of them were the successive deans from 1900 until the end of the century of the school.

An index of the development of the institution between 1893 and 1910 is found in a comparison of the number of teachers. The number of members of this staff in 1893-94 was twenty-four, of whom seventeen were professors or acting professors. This had increased to one hundred and two in 1909-10, of whom eighteen were professors. It is evident that this increase of three hundred and twenty-five per cent came from extension of appointments to grades below that of professor.

All of the teachers who joined the teaching staff, except demonstrators, have been severally mentioned in the narrative chapters of the first half-century of the institution. Space prohibits similar mention of all of those who were on the teaching staff in the second half-century. Their names appear, from professors to instructors inclusive, in Appendix B. In the narrative chapters for the second half-century personal mention is restricted to those who became professors, with a few exceptions of men in lower titles who had charge of important divisions of the teaching.

A considerable reorganization of the faculty introduced the second half-century, in June 1893. The professorial titles of Dr. John H. Lowman and Dr. John P. Sawyer were changed. Dr. William T. Corlett and Dr. Christian Sihler, who had been acting professors, were advanced to professorships. Three new men were added: Dr. Dudley P. Allen, who had been a lecturer from 1883 to 1889, was appointed Professor of the Theory and Practice of Surgery; Dr. George Coates Ashmun, who had been a professor in the Medical Department of the University of

Wooster, was appointed Professor of Hygiene and Preventive Medicine; and Dr. Benjamin Love Millikin, who had been teaching in the dispensary without title during several years, was appointed Professor of Ophthalmology.

Dr. John P. Sawyer, in his change of title, had resigned the professorship of physiology to become Professor of Medicine and Clinical Medicine. Dr. Sawyer recommended for the vacancy thus created the man under whom he had studied physiology in Germany in 1887-88, and Johannes Wilhelm Gad, who had been Director of the Physiological Institute in Berlin, was invited to come to fill the professorship. He indicated his acceptance and was elected Professor of Physiology in August 1893. He was the first full-time professor on this faculty and the only one in 1893-94. Thus six professors were added to the faculty from June to August 1893, and the resignations of five professors of the Wooster group in September did not seriously deplete the faculty because there were left on the faculty professors in every subject taught by the men who resigned.

Among the resignations was one of the professors of anatomy. The remaining professor was nearly seventy years of age and had done little teaching during the past year because of ill health. He was unable to assume the entire teaching of anatomy. Therefore it was necessary to secure someone to carry the major part of the teaching of this subject.

The resignation to which reference has been made was received on the morning of September 4. That evening Dr. Allen and Dr. Sawyer left to visit eastern medical colleges, seeking a teacher of anatomy. The matter could not be delayed because the session was due to open nine days later. They were fortunate in finding at the University of Pennsylvania a young man of twenty-five years who had been graduated in medicine in 1890 and had served as demonstrator and quiz-master in anatomy in that institution for three years. He was highly recommended for his scholarship and teaching ability. Dr. Allen and Dr. Sawyer were satisfied that a good teacher had been found, and, returning to Cleveland, secured the appointment of Dr. Carl August Hamann as Acting Professor of Anatomy. Dr. Hamann

was present on the opening day of the session to begin a service to the medical school and city that continued for more than thirty-six years. His first year of teaching was so highly successful that a year later he was made Professor of Anatomy in spite of his youthful years. Further details of his career are postponed to chapter XVIII.

The teaching of 1893-94 was carried by fourteen professors, an acting professor, and some demonstrators and assistants. Dr. Gad was the first professor brought from a foreign country. The common experience of many institutions is that such men expect especial acclaim and large salaries. Dr. Gad's inexpert command of spoken English impaired his effectiveness in teaching. Nevertheless he asked at the end of one year that his salary be raised to equal the highest professorial salary paid in any department of the university. This request was denied and he resigned after teaching one year. He stated publicly that the reason for his resignation was that the members of his family were unhappy in Cleveland and wished to return to their native land. Dr. Gad became Professor of Physiology in the German University of Buda-Pesth, Bohemia, in 1895, where he served until 1911, when he was made a professor emeritus. The first attempt at bringing a foreigner as a professor was not happy, but the lesson was not sufficiently remembered in some cases in later years.

Also at the end of the session of 1893-94 Dr. Christian Sihler, who had taught histology since 1888 and had been a professor one year, resigned to accept appointment in the Medical Department of the University of Wooster.

This left vacancies in physiology and histology. Decision was reached to combine the teaching of these two subjects under one professor, as had been done from 1865 to 1888 and as was the custom in British medical schools. Again Dr. Allen went to eastern medical colleges seeking a teacher of a laboratory subject. Dr. George Neil Stewart was found teaching in a subordinate post at Harvard Medical School, and was appointed Professor of Physiology in 1894, the word "histology" being added to the title a year later.

Dr. Stewart, a Canadian by birth, had an extensive training.

He was at this time thirty-four years of age and held five degrees in arts and medicine from the University of Edinburgh, and the degree of Doctor of Public Health from the University of Cambridge. He had been a demonstrator of physiology for two years in an English institution and instructor in that subject for one year at Harvard Medical School. He was an excellent teacher and popular with students and colleagues. Moreover, he began the first effective program of research in the institution, and a year after his arrival the first edition of his successful text-book of physiology appeared.[10]

One year under a new and progressive dean, and freedom from contention in the faculty had given opportunity to plan a general advance in the institution which would require more teachers. In addition to the bringing of Dr. Stewart and the promotion of Dr. Hamann to a full professorship, in 1894 one professor was appointed from the staff of the rival regular medical college, and another professor and an associate professor were brought from another city.

Dr. Frank Emory Bunts was graduated from the Medical Department of Western Reserve University in 1886 after having been graduated at the United States Naval Academy and serving a tour of foreign service in the navy. He began teaching minor surgery in the Medical Department of the University of Wooster in 1887 and was a professor there from 1889 to 1894, when he was appointed Professor of Principles of Surgery and Clinical Surgery in the Reserve medical school. He occupied this professorship during thirty-four years. He was an excellent teacher and had a large part in the development of the surgical service at Charity Hospital. He was one of four teachers of the School of Medicine who founded the Cleveland Clinic in 1921, which has developed into an extensive institution of medical service.

Gynecology was taught by an acting professor who resigned in 1894 to move to another city. The faculty turned to the Johns Hopkins University for a teacher and in 1894 appointed Dr. Hunter Robb as Professor of Gynecology. He was attached to Lakeside Hospital and another man was appointed lecturer in the subject to give part of the instruction at another hospital.

Dr. Robb had taken part of the course in arts at the University

of Pennsylvania and then had been graduated from its medical department in 1884. He worked in hospitals in Philadelphia for seven years and then was Associate in Gynecology in the Johns Hopkins University from 1891 to 1894. He continued as a professor in Cleveland for twenty years until he retired from practice and teaching in 1914 and moved to an eastern city.

Dr. William Henry Humiston was graduated at Long Island Hospital Medical College in 1879 and immediately began practice in Cleveland. He was appointed Clinical Lecturer in Gynecology in 1894 and promoted to an associate professorship with a vote in the faculty in 1896. He was made Clinical Professor of Gynecology when Dr. Robb resigned in 1914. He taught in the institution for thirty-one years until he retired as an emeritus professor in 1925.

One professor was appointed in 1895. The teaching of pathology during the first half-century of the existence of the medical school had been chiefly didactic, to which demonstrations, both gross and microscopical, had been added increasingly. Bacteriology began to be taught in American medical colleges in the 'eighties, and in this medical school was added to pathology in 1893. Instruction was didactic, with some demonstrations in 1893-94.

Dr. Isaac N. Himes, the professor of these subjects, had received his training long before the development of laboratory teaching. He was progressive, and following a year of clinical study in Europe in 1889-90, became conscious of the desirability of systematic laboratory courses in these subjects. However, he did not wish to undertake the establishment of such courses himself because of lack of training and also because of impaired health and the fact that he was carrying the deanship. Therefore he sought an assistant for this work.

The leading center in development of pathology and bacteriology in America was at the Johns Hopkins University, which had given a preliminary medical course since 1887 and had begun a full course in 1893. Seeking a man in Baltimore, the representatives of the Medical Department of Western Reserve University chose Dr. William Travis Howard, Jr., who

was appointed Associate Professor of Pathology and Bacteriology in July 1894. This was the first use of the title of associate professor in this school.

Dr. Howard had taken part of the course in arts at the University of Virginia, and then had been graduated in medicine at the University of Maryland in 1889. He was a graduate student in biology for a year, secured clinical training in the dispensary of the Johns Hopkins University, and for three years was an assistant in the pathological laboratory and did research. He lectured on pathology and bacteriology at the Baltimore Medical College in 1892-93, in which institution the first laboratory teaching in these subjects in Baltimore had been given. Dr. Howard also served as visiting physician at a Baltimore hospital. This extensive training was in contemplation of entering medical practice with expectation of becoming a consultant. The death of Dr. Himes before Dr. Howard had completed his first year on the Reserve medical teaching staff, brought promotion to a full professorship in 1895. He continued in this for nineteen years, resigning in 1914 to return to Baltimore.

The service of Dr. Howard in Cleveland was not restricted to teaching medical students. Upon his arrival he became a member of the staffs of Charity Hospital and City Hospital, and later of Lakeside Hospital, in all of which he founded the position of resident pathologist. He established a bacteriological laboratory at City Hospital in 1894, the first one in Cleveland. This led to establishment of a municipal laboratory in 1901 under the direction of Dr. Howard with the title of City Bacteriologist. He served in this position until 1912, and after 1901 for nearly twenty years the municipal laboratory was located in the medical college building. Dr. Howard did research and stimulated his assistants to research. Thus he effectively served the medical school, three hospitals, and the municipality.

Two men who had been teaching under subordinate titles for a few years were promoted to professorships in 1896. Dr. Edward Fitch Cushing was made Professor of Pediatrics. He was a graduate in arts of Cornell University and in medicine of the Harvard Medical School in 1888; and after hospital serv-

ice in Boston, he located in Cleveland for practice, in which he emphasized pediatrics. He was of a distinguished medical family of Cleveland. One of his grandfathers, Erastus Cushing, had been one of the committee of examiners appointed in August 1843 to inaugurate the medical school, and later served as a censor. His father, Dr. Henry Kirke Cushing, had been a teacher in the Medical Department of Western Reserve College from 1856 to 1861, and a professor from 1861 to 1865 and again from 1878 to 1883. This service was supplemented by service as a trustee of Western Reserve University from 1888 until 1901. He had a large influence in this capacity in the transformation of the institution from what was essentially a proprietary school to a real university department with the modern program of medical teaching.

Dr. Edward Cushing not only had a distinguished heritage but was a physician of much capability. The subject of pediatrics had been combined with obstetrics under a single professorship after 1878. The reorganization of the faculty in 1893 included additional attention to pediatrics and Dr. Edward Cushing was appointed Lecturer in Pediatrics, advanced to an assistant professorship in 1895 and to a professorship in 1896.

He greatly developed the subject in the next fifteen years both in the curriculum and in the hospitals. The separate wing for children at Lakeside Hospital came primarily from the efforts of Dr. Cushing and was the direct antecedent of the present separate hospital for babies and children. Dr. Cushing was a good teacher and influential in bringing to the medical school several gifts and endowments. His unexpected death in 1911 at the age of forty-eight years was a serious loss to the medical school and hospitals.

Dr. Charles Franklin Hoover located in Cleveland for practice in 1894, and was immediately appointed on the teaching staff. He was a graduate in arts of Harvard College and in medicine of Harvard Medical School in 1892. He had interrupted his medical course to study a year in Europe, and after graduation in medicine he studied two years more in Europe. His industry, extensive training, and personality at once made him

an important member of the teaching staff. He was appointed an assistant in medicine in 1894 with service at City Hospital. The greater part of his career was connected with Lakeside Hospital. In 1895 he became Instructor in Physical Diagnosis and the next year he was made Professor of Physical Diagnosis, a rapid advance through recognition of his efficiency as a teacher. This was the first time that the phrase "physical diagnosis" had been used in a teaching title since the middle 'sixties, and the first use of this phrase alone in a professorship. Dr. Hoover emphasized this subject and soon began clinical and laboratory research in it.

His title was changed to Professor of Medicine in 1909 when he became the head of this extensive department. Further comment on his service will be made in a later chapter.

No professors were appointed in 1897, 1898, or 1899. George Washington Crile joined the faculty in 1900 as Clinical Professor of Surgery. He had been graduated in arts, and in medicine at the Medical Department of the University of Wooster in 1887, where he taught for nine years, first histology, then physiology, and later surgery, in which subject he was a professor when appointed at the Reserve medical school. He had begun a program of experimental research before 1900 that had already led to answers to some clinical problems. Further discussion of his service is postponed to the next chapter covering the period of his major activities in the Reserve medical school.

Two major changes of professors came at the end of the session of 1902-03. Dr. George N. Stewart, who had been the professor of physiology for nine years, resigned in January 1903, to accept a similar position in the University of Chicago at the beginning of the next academic year. Dr. Perry L. Hobbs, who had taught chemistry for fourteen years, resigned in the spring of 1903.

Decision was reached to combine these two positions under a single professor, partly for reasons of economy but mainly because the higher entrance requirements had much reduced the course in chemistry. The major part of the future teaching in chemistry would be in biochemistry, requiring a man trained

in both physiology and biochemistry for the combined professorship. Few men in America had training and teaching experience in both of these subjects.

Dr. Stewart was about to visit Great Britain and he was asked to seek a suitable man in British medical schools for the vacancy. Upon his recommendation, supported by testimonials of several British professors, Dr. John James Rickard Macleod was appointed as Professor of Physiology in May 1903, when he was less than twenty-seven years of age. Some members of the faculty hesitated to appoint so young a man to a professorship. The average age at time of appointment of all men elected as professors in the past twenty-five years had been over thirty-seven years. The great success as a teacher of Dr. Hamann, who became a professor at the age of twenty-six years, was a large factor in overcoming the objections of a few professors. It proved a happy choice.

Dr. Macleod, a Scot by birth, had received his medical degree at the University of Aberdeen and the later degree of Doctor of Public Health at the University of Cambridge. He had taught physiology and biochemistry in subordinate positions at the London Hospital Medical College for three years. His teaching career of fifteen years in Cleveland was highly successful and in these years he did much research and publication.

Dr. Torald H. Sollman was appointed Professor of Pharmacology and Materia Medica in 1904. He had been graduated at the Medical Department of Western Reserve University in 1896. He then served as a demonstrator of physiology and histology for two years. In 1898, as already mentioned, he had re-established the laboratory of pharmacology and pharmacy when he received the title of Lecturer in Pharmacology. He was promoted to assistant professor in 1901, to associate professor in 1903 and to a professorship in 1904. Further details of his career are postponed to chapter XVIII.

Dr. Frederick C. Waite was appointed Professor of Histology and Embryology in 1906. He had joined the teaching staff as an assistant professor in 1901 and had established the laboratory of histology and embryology as already mentioned.

Dr. Stewart had taught both physiology and histology until

1901, when his research had developed to a point where he wished relief from some of his teaching. Therefore histology was again detached from physiology, as had been done in 1888, and Dr. Waite had been brought from a subordinate position at the University of Chicago to teach histology and embryology.

Dr. Waite was a graduate in arts of Western Reserve University and held the degree of Doctor of Philosophy from Harvard University. Before 1901, he had eight years' experience in teaching, mainly in biology, but the last year in histology and embryology at Rush Medical College. This was the first appointment in the second half-century of the medical school of a man who was not a graduate in medicine. The professor of chemistry, first appointed in 1889, also lacked a medical degree. Dr. Waite served as secretary of the faculty from 1907 to 1916 and as registrar from 1907 to 1915. He continued as a professor until 1940, when he was retired as a professor emeritus. The laboratory established in 1901 continued to be independent until 1940, when it was absorbed by the department of anatomy.

Dr. George N. Stewart, who had been Professor of Physiology from 1894 to 1903, was recalled from another university in 1907 to become Professor of Experimental Medicine. No more professors were appointed until 1910.

The faculty contained twelve professors and five acting professors in 1892-93. Nineteen men were appointed to full professorships in the sixteen years from June 1893 to June 1909. One professor died and twelve resigned in this interval. The faculty contained eighteen professors in 1909-10, of whom only two had been professors in 1892-93, and only two more had been teachers in the medical school in that year. Numerous additions in grades below that of full professor were made. None of those in grades below professors had been members of the teaching staff in 1892-93. The teaching staff had almost completely changed in seventeen years.

Financial Matters

Courage was shown in the decision in 1893-94 to inaugurate a program of extensive advance, when the total annual income of the medical institution was less than $18,000, approximately

$8,000 from endowments and less than $10,000 from students. Salaries of full-time professors and of their assistants, the establishment and equipment of laboratories, and prospective increase of salaries all required increasing expenditure, and the ways in which this was met requires some explanation.

The income for operation of the medical school came from three sources: the tuition and fees paid by students, the yield from endowments, and annual gifts by individual trustees. Several gifts for special use, and not repetitive, were received from time to time. Two examples must suffice. Fourteen persons contributed $2,100 in 1894 for equipment of the pathological and physiological laboratories. Five of these contributors were trustees. In the spring of 1896 gifts of $26,900 were received for the proposed new chemistry building. Col. Oliver H. Payne gave $13,000 and Mr. Jeptha H. Wade and Dr. Henry K. Cushing, both trustees, gave $5,000 each. Nine other individuals, of whom four were trustees, gave a total of $3,900.

The tuition charge was $50 from 1873 to 1887; $75 from 1888 to 1893; $100 from 1894 to 1897; $125 from 1898 to 1908; and $150 beginning in 1909. The traditional graduation fee of $30, and the hospital fee of $10 in each of the last two years of the course, continued to be charged until both were abolished in 1897. Colleges of arts commonly charged laboratory fees in addition to the tuition and these were adopted when laboratory instruction began in this medical college in 1888. When an advance in tuition was made, part or all of the laboratory fees were absorbed into the tuition charge, only to reappear as additions in a few years.

The income from tuition of less than $10,000 in 1893-94 gradually increased to $15,000 in 1900-01 and then diminished to $7,000 in 1904-05, the low point of tuition receipts in twenty-five years. Tuition income had recovered to $14,000 in 1909-10.

The dean had since 1883 been the director of expenditures. The dean appointed in 1895 lacked facility in financial matters, and in April 1896 the faculty appointed a financial committee to take charge of expenditures. This introduced the budget system. The financial committee assembled the requests of the

several teachers, which was presented to the faculty at the close of the year, and a budget of all expenditures for the next academic year was adopted. This brought into the faculty discussion of salaries by colleagues—considered unfortunate—and when the trustees created the position of executive officer in 1900, the duty of preparing the budget was assigned to that officer, who presented it directly to the president, rather than to the faculty. Neither the faculty nor any of its committees had anything to do with the budget, except to submit requests, from 1900 until a date beyond the limits of this chapter. Budgetary matters became entirely the function of the executive officer of the medical faculty and the president.

The first budget was submitted by the financial committee for 1896-97 and exceeded the probable income. This brought the first annual contribution by individual trustees. The amount was $2,000 and increased to over $10,000 in a few years. These contributions by individual trustees reached a total of $102,000 in the twelve years from 1900 to 1912.[11] The budget passed the figure of $25,000 in 1900 and $50,000 in 1906. The executive officer of the medical faculty prepared a desired proposed budget of over $107,000 when the trustees were seeking additional endowment in 1910.[12]

The faculty adopted a policy in 1893 that had important influence on the finances of the institution during the next twenty-five years. The members of the faculty had received money compensation by the annual division of the proceeds through the session of 1892-93. A few subordinate teachers had received a small fixed annual sum. The amounts received by professors was in the nature of a salary, although not predetermined, based on the success of the school, a method used by every medical college. No one expected men to teach medical students without compensation.

Several members of the faculty were convinced that teaching of a laboratory subject and practice of medicine brought serious conflict to the detriment of the teaching. They wished to have the laboratory subjects taught by men free from this conflict; also they desired to have research done in the medical school.

The accomplishment of these two changes required more money for salaries for full-time men than was available from the endowment recently received, which provided salaries for only part-time service in five named laboratory subjects.

The men teaching the clinical subjects, with a fine spirit of unselfishness, agreed to forego their share of the income which, added to other sources of income, would permit of employment of some full-time teachers. With the exception of one man who came later, no clinical teacher received any money compensation during the next twenty-five years. The number of full-time laboratory teachers was increased from one in 1893-94 to seven ten years later. The research program began in 1894-95. These advances could not have been made at that time except for the unselfishness of the clinical teachers, who deserve far more credit for the advances in the school between 1893 and 1910 than has been given to them.

The year 1893-94 was one of planning for the future advance of the institution, with some difference of opinion as to how far and how fast the advance should go. The Woods Fund was given in December 1892 in securities to the value at that time of $125,000. This value had advanced within a year to $149,000. Two small endowments received in the 'eighties brought the total endowment to a little over $160,000. The faculty decided that it would require additional endowment to put in operation the plans that were believed immediately desirable. Therefore in June 1894 the faculty asked the trustees to raise $250,000 additional endowment.

The response was slow. Nevertheless, in 1898 decision was reached to advance the entrance requirements greatly. Mr. Howard M. Hanna gave a fund of $12,000 in 1897, originally designed to support teaching of medical jurisprudence. This was soon changed to an endowment of a research fellowship alternating in its occupants between pathology and physiology. This was the first endowment in this school definitely restricted to research. The gift of Mr. Woods had been for teaching and research. The total endowment of the medical school in June 1900 was $197,400.[13]

The desire to institute laboratory teaching in clinical micros-

copy brought another gift from Mr. Hanna in 1901. The amount was $40,000 and the fund was named in memory of his father, the Leonard Hanna Fund. Dr. Leonard Hanna was a prominent physician in northern Ohio at the time of the Civil War.

The plans for advance were much expanded between 1894, when the faculty asked the trustees to raise a quarter of a million dollars for additional endowment, and June 1902, when Dean Millikin, in his second report to the trustees, expressed the opinion that the medical school needed one million dollars of additional endowment in the near future. The first response was again by Mr. Howard M. Hanna in a gift of $70,000 for endowment of the professorship of anatomy, the fund to be named in memory of Henry Willson Payne, a boyhood friend of Mr. Hanna.

An endowment larger than any before received was given in 1906 to found the department of experimental medicine. Mr. Howard M. Hanna and Col. Oliver H. Payne gave each $100,000, of which $160,000 was for endowment of the department. Three years later the amount of this endowment was stated as $170,000. This difference of $10,000 may represent increase in value of securities or it may confirm that $30,000, recorded in one place as the cost of the laboratory building, was correct instead of the usually recorded figure of $40,000. Mr. Hanna gave a separate additional fund of $17,000 in 1908 as endowment to maintain equipment. The total endowment of the medical school in 1908 was approximately $535,000, which included the John Huntington Fund of $40,000 in the hands of a separate corporation not connected with the university but which customarily gave its income to the medical school. Mr. Howard M. Hanna had given over $220,000 of this total amount. Mr. Woods in 1892 and Mr. Hanna from 1897 to 1908 were the only trustees who had contributed to the endowment. Mr. Payne was not a trustee. However, several other trustees had been making annual contributions to the budget and some of them had contributed to endowments in other departments of the university.

Dean Millikin had emphasized in each annual report the

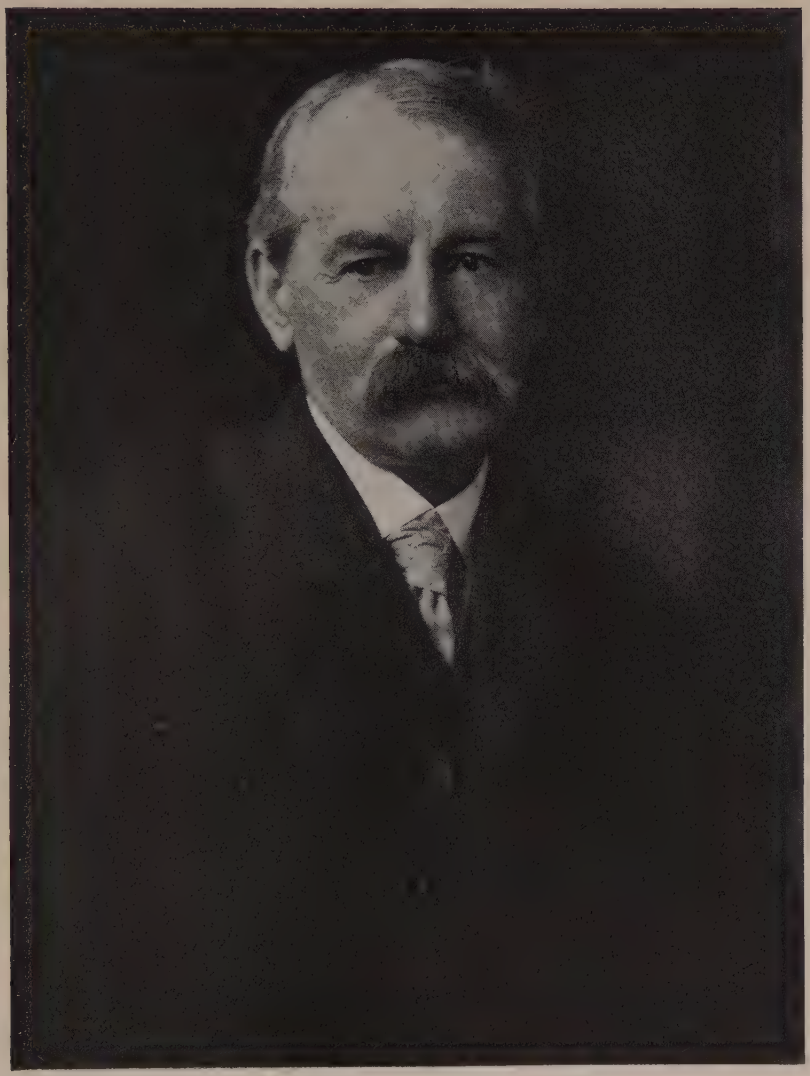
need of more endowment and "the million dollar fund" came to be a familiar phrase. The uncertainty of the experiment of higher entrance requirements for entering the medical school persisted until it was felt that the danger point had been passed when the enrolment returned to more than a hundred students. During this period of uncertainty no concerted effort was made to increase the endowment. The trustees began an effort in 1907 to raise "the million dollar fund." Mr. Howard M. Hanna responded with a subscription of $250,000 in 1908, condition upon receipt of subscriptions for the entire amount. He annulled this condition and paid the entire amount in 1909. The trustees in February 1910 applied to the Rockefeller Foundation for a subscription, without success. The early completion of this fund belongs to the period of the next chapter.

Change of Relations to the Dental Department

The dental department, organized in 1892 as a part of the medical department, occupied two large rooms in the medical college building until one room was released in 1894 and the other in 1896, and the dental department moved to rented quarters several blocks away.

The majority of those teaching dental students were members of the medical teaching staff and as long as the entrance requirements to the two departments were essentially the same, the two groups of students were taught in common classes in several subjects. The great difference in the preliminary education required of dental and medical students, which began in 1901, prohibited the continuation of common classes, and separate classes were organized for dental students. Also, although the teaching of inorganic chemistry had been abandoned for medical students, it had to be continued for dental students. The abolition of the department of chemistry in the medical school and the combination of physiology and chemistry in 1903 presented further difficulty in teaching chemistry to dental students.

Moreover, the conduct of separate classes for dental students occupied time and effort of full-time teachers which the administrators of the medical school believed could be more



Hunter Holmes Powell. Professor, 1875-1907; Dean, 1895 to 1900

profitably devoted to research. Therefore at the end of the session of 1902-03 all full-time medical teachers were notified that they should no longer accept classes of dental students.[14] The small additional stipends which the dental department had paid these teachers was in part compensated by advances in salaries for medical teaching.

Some of the younger part-time teachers assumed the teaching of courses in the medical sciences to dental students in laboratories established outside the medical school building, except in the subject of anatomy. The senior teachers in the laboratories had no relation to the teaching of dental students during the eleven years from 1903 to 1914.

Summary

The seventeen years from 1893 to 1910 included many activities and it has required many pages to describe them, even briefly. Improvement was made in every year. The first factor was the release of their compensation by the clinical teachers. Then came extension of the course both in the length of each session and in the number of sessions required to be attended before receiving the medical degree. These extensions necessitated expansion and remodeling of the curriculum in 1894, and still further changes were made when the entrance requirements were advanced in 1901.

The policy which increased the number of full-time teachers resulted in better teaching and the beginning of a program of research which was enlarged after 1900. An incomplete list of publications by members of the teaching staff between 1900 and 1910 contains nearly 150 articles based on research done in the medical school, and a number of books.[15]

New departments and new laboratories were established. The personnel of the teaching staff greatly increased. Attendance increased and then dropped when higher preliminary educational requirements became operative, bringing a few years of deep concern and doubt as to the possibility of maintaining the advance. Endowments slowly increased bringing some relief in the financial problems.

The change of relations of the medical department to the university as a whole is a striking characteristic of this period. The medical department had been almost completely autonomous during fifty years. Its faculty had refused to cooperate in a university catalogue when first proposed in 1884 at the organization of the university. Two minor incidents show the change of trend in the late 'nineties. The medical faculty in March 1897 voted to approve adoption of academic costume at Commencement for both faculty and students, and at the Commencement of May 1897 the faculty was present in academic costume for the first time, thus showing an outer symbol of university integration. The Commencement of the medical department had traditionally been a separate public occasion. Even after the medical department had created a dental department as a part of itself, the dental and medical students did not receive their diplomas at the same time. Two Commencements were held on successive evenings. The medical faculty in May 1898 voted to delay the opening of the next session so that the end of the session should come in June rather than in May and the medical department joined in the university Commencement of 1899, for the first time.

The Medical Department of Western Reserve University received a rating of A in the first classification of medical colleges by the American Medical Association in 1910, and since that date this school has been in the highest rated group in all published classifications.

Mr. Abram Flexner conducted a survey of medical education in the United States for the Carnegie Foundation for the Advancement of Teaching in 1909. He expressed to the president of the university after completing this survey, that in his opinion "The Medical Department of Western Reserve University is next to Johns Hopkins University which, for various reasons occupies an exceptional position, the best in the country."[16]

This gratifying opinion was not an unmixed blessing. Citizens of Cleveland financially able to support the institution, felt that if Cleveland already had the second best medical school in the country, it did not seriously need financial aid.

The event that has been selected to terminate the period considered in this chapter—the consolidation with the Medical Department of Ohio Wesleyan University—has already been described in chapter XIII. It became effective on July 1, 1910 and on that day the Medical Department of Western Reserve University not only became the only regular medical school in Cleveland but had thoroughly become a university department.

The many steps that changed aloofness to full university cooperation by the medical school were largely the result of the administrative art of President Charles F. Thwing, aided in the beginning by only two members of the medical faculty. It was his leadership that made it possible for members of the medical faculty, at first few in number, to inaugurate and carry forward a program of advance. He insisted that no expenditure should be authorized until the money was in hand, and the medical school was never in debt while Dr. Thwing was president. The period of great revolution in this medical school was in the thirty-one years that Dr. Thwing served as president from 1890 to 1921. The fact that he was president was a potent factor in the advances in the School of Medicine during these years.

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XVI

STABILIZATION ACHIEVED: 1910-1924

IN THIS CHAPTER is considered the period from the union of the two regular medical schools in Cleveland until removal of the medical school to its new building on the university campus. It was not a period of dramatic changes but rather one of steady progress in every feature of the school that had been inaugurated in the preceding period.

The year 1910-11 opened with a problem not known to have arisen in any other medical school. This was the instruction of two separate groups of students in the same institution; groups that differed in preliminary education and in the content of the medical instruction already received. The first-year class was free from this complication. A separate curriculum was maintained in the second, third, and fourth-year classes and the parallel classes were taught separately in most of the subjects.

The major object of the consolidation was to allay as soon as possible the division in the local medical profession between the supporters of the former two rival institutions. This would be effective only if those who had come from the Ohio Wesleyan school to the Western Reserve school could be fully satisfied, both teachers and students. The two employees who had met students daily in the office of the Ohio Wesleyan school were brought to the Western Reserve school and installed in similar positions so that the new group of students should meet familiar faces in their relations to the administration. The former Ohio Wesleyan students were taught by their former teachers as far as it was possible to arrange the schedule, while they enjoyed the larger laboratory and clinical facilities possessed by the Western Reserve medical school.

A few of the Western Reserve students, leaders in their classes and fraternities, were called in by the dean and asked to see that their fellow students should make no criticisms of the Ohio Wesleyan school nor of the lesser preliminary education of the Ohio Wesleyan group. All of the Western Reserve students

responded heartily to this request, with the result that no untoward incident occurred between any individual students, and in a few weeks the former Ohio Wesleyan students ceased to lament the disappearance of the institution in which they had begun their medical education.

The new teachers were shown every possible courtesy, and they reciprocated. The officers in conversation and in print used the word "consolidation" instead of the word "absorption" in referring to recent events. Careful planning by the officials of the Western Reserve faculty brought a result accurately described two years later when Dean Millikin wrote in his report to the trustees: "The consolidation of the Ohio Wesleyan Medical School with the Western Reserve Medical Department has been a happy solution of a problem and has aided greatly the improvement of medical education in Ohio. The good feeling with which the consolidation has been worked out is a matter of much congratulation to the entire medical profession and a matter of great advantage to the community."[1]

Enlargement of Clinical Facilities

The major improvement in clinical facilities related to City Hospital. The consolidation with the Medical Department of Ohio Wesleyan University in 1910 brought the staff at that hospital, and the teaching privileges there, under control of the Western Reserve medical faculty during eight months of each year. The Cleveland-Pulte Medical College (homeopathic) had control for the other four months. Late in 1913 the homeopathic institution began negotiations to move that institution to Columbus, which was done at the end of the session of 1913-14.

The prospect that the homeopathic institution would soon no longer need privileges at City Hospital led to a negotiation between the city and the university. Dr. Hamann, dean of the medical school and a member of the staff of City Hospital for nearly twenty years, conducted the negotiations on the part of the university.

The matter was concluded in February 1914 with an agreement that Western Reserve University should nominate the

entire staff of City Hospital for service throughout the year. This gave to the medical school uninterrupted teaching privileges in that hospital and permitted the expansion of the clinical clerk system that was already in operation in a limited degree. Since 1914 City Hospital has been largely used in the work of the medical school.

A new building for the babies dispensary was first occupied in February 1911. This was located in the emergency district of the city and increased the teaching facilities in pediatrics, bringing about 1,500 new patients with 10,000 visits annually.

Some increase in capacity of the hospitals after 1914 afforded adequate material for both dispensary and hospital teaching of the number of students enrolled.

Origin of New Departments

The consolidation in 1906 of twenty so-called departments into seven divisions, called departments, was made with full appreciation that some of the fields of instruction would probably be separated as independent departments within a few years.

The consolidation of 1906 included an agreement that the laboratory of histology and embryology, placed in the division of anatomy, should remain autonomous in administration and budget so long as the man then director of that laboratory remained on the faculty. On the establishment of the laboratory of experimental medicine, a similar agreement of autonomy from the division of medicine was made. These two autonomous laboratories were called departments throughout the period of this autonomy.

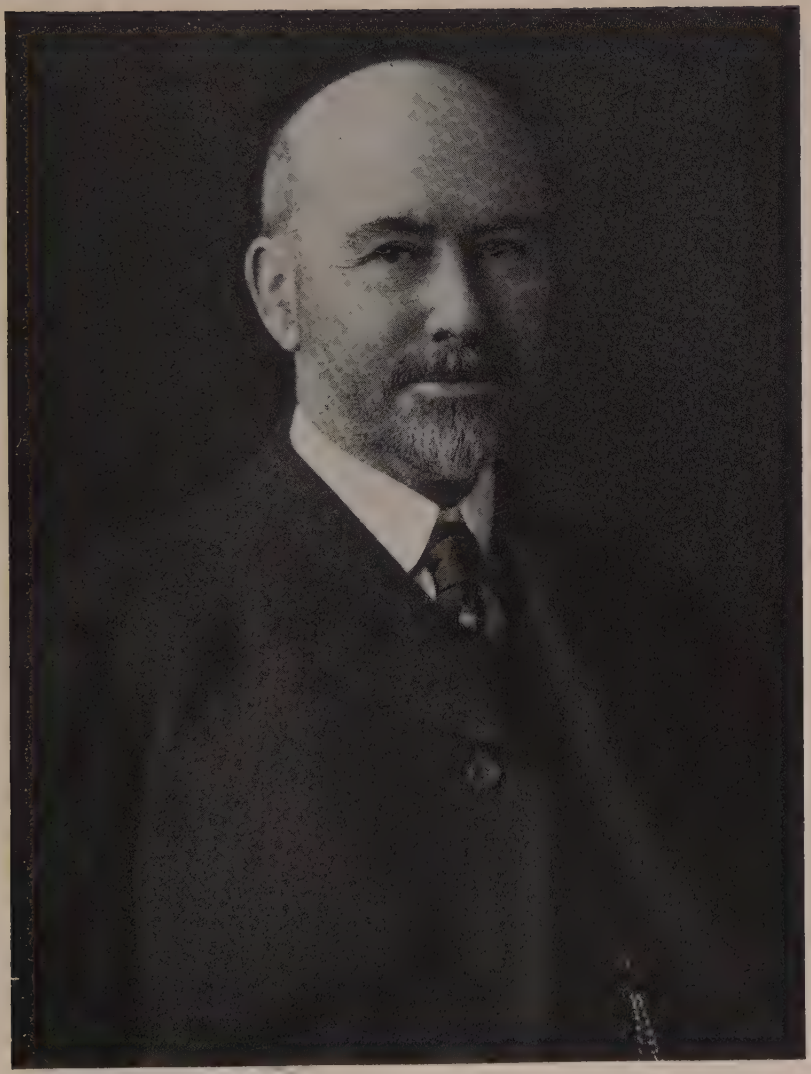
These two agreements were carried out notwithstanding that some newcomers sought to annul them. The laboratory of experimental medicine continued autonomous during twenty-three years, until it was absorbed by medicine in 1930 shortly after the death of Dr. Stewart, its director. The laboratory of histology and embryology continued autonomous for thirty-four years, though there was constant interference by one individual, a newcomer, from 1912 to 1938. This laboratory was absorbed by anatomy when its director, Dr. Waite, retired in 1940.

Development of a new department began in 1909 when the man who had been teaching hygiene for sixteen years withdrew from teaching that subject. The subject was assigned to Dr. Roger Griswold Perkins, then an associate professor in the department of pathology and bacteriology, and the word "hygiene" was added to the name of the department. Dr. Perkins extended the instruction by inaugurating field trips and establishing an optional course in laboratory hygiene. Dr. Perkins was appointed Professor of Hygiene and Preventive Medicine in 1910, but hygiene continued in the composite department.

In 1912 a member of the Board of Trustees offered an endowment in support of hygiene if a separate department was organized in this subject. The composite department was divided into a department of pathology and a department of bacteriology and hygiene. The laboratory of pathology was moved to Lakeside Hospital at the end of the session of 1911-12 to occupy jointly with clinical microscopy the laboratory established for the latter in 1901. Bacteriology and hygiene continued to occupy the former laboratory of the composite department in the medical school building.

When the professor of diseases of children died in 1911, Dr. Henry John Gerstenberger, then Lecturer on Diseases of Infancy, was put in charge of pediatrics. He developed the courses and facilities during the next two years and was rapidly promoted until he was appointed Professor of Pediatrics in 1913. The subject of pediatrics was separated from the department of medicine and established as an independent department at the beginning of the session of 1913-14. Thus two new departments were organized in two successive years.

The report of the dean of the medical school of June 1916 states: "A department of Biochemistry was established in 1915. . . ."[2] This establishment was preliminary rather than complete. The departments of chemistry and physiology had been combined in 1903, as already stated. A professor of physiology directed the teaching in these subjects. He participated in teaching biochemistry until the end of the session of 1905-06. The teaching of chemistry after 1906 was under charge of Dr.



Benjamin Love Millikin. Professor, 1893-1912; Dean, 1900 to 1912

Howard Davis Haskins, a graduate in arts at the University of Michigan and in medicine of the Medical Department of Western Reserve University in 1895. He had ten years of teaching experience before 1906. He was promoted until he became Associate Professor of Organic Chemistry and Biochemistry in 1912. Dr. Haskins resigned in December 1914 to accept the professorship of biochemistry in the University of Oregon.

The vacancy was filled by appointment of a less experienced teacher, and the professor of physiology again participated in teaching biochemistry. The short course in organic chemistry at this time was transferred to the care of the department of chemistry in the college of arts, and given in its laboratory from 1915 to 1920, when this course was abandoned.

There was actually no separate department of biochemistry in 1918 when the professor of physiology resigned. The senior assistant in biochemistry resigned at the same time. Biochemistry was separated from physiology at the beginning of the session of 1918-19, and Dr. James Lucien Morris was appointed Assistant Professor of Biochemistry in charge of the subject. Dr. Morris, after graduation from a college of arts, had taught biology for three years. He received the degree of Doctor of Philosophy from Harvard University in 1914 and had four years of experience in teaching biochemistry in three medical colleges before he came to Cleveland. He was promoted to an associate professorship in 1923 and continued in charge of biochemistry until his death in March 1926. The first professor of biochemistry in this medical school was appointed in 1927.

Thus the seven departments formed by consolidation in 1906 were increased by three new departments in the next twelve years; bacteriology and hygiene in 1912, pediatrics in 1913, and biochemistry in 1918. No more departments were created in the second half-century.

Development of the Curriculum

The curriculum had been recently studied and reorganized and was considered in a stable condition in 1910. The institution of a supplementary curriculum for the Ohio Wesleyan

group of students in 1910 did not affect the course given to the candidates for the medical degree of Western Reserve University. Inasmuch as no new students were admitted to the work of the supplementary curriculum, the number of years in this decreased annually as each class advanced until this curriculum disappeared with the session of 1912-13.

The regular curriculum of the first and second years did not change greatly between 1910 and 1924. A few courses were interchanged so that instruction was in a different semester and in one case in a different year of the curriculum. The curriculum of the combined first and second years increased from 2,080 hours in 1910-11 to 2,244 hours in 1923-24, an increase of over seven per cent. The increase was not uniform in the several departments. Increase arose from organization of new laboratory departments in hygiene and bacteriology and in biochemistry and from the advent of new professors at the head of the laboratory departments, of anatomy, pathology, and physiology.

A few short courses were introduced, usually only new names for part of the instruction previously given. More and more entering students had taken organic chemistry in the college of arts, and the course in this subject was progressively lessened until it was required for admission beginning in 1920.

Optional courses were first offered in 1906. They were little patronized by the students, who found themselves sufficiently occupied with the required courses. Also no definite reward was given for completion of optional courses. The most popular optional course was that offered under the Reserve Officers Training Corps of the Army. This course, introduced in 1920, was progressive through the four years of the medical curriculum, and included attendance for six weeks in one summer at the Medical Field Service School at Carlisle, Pennsylvania. While in attendance at this summer course the student received army pay and all expenses. He also received commutation for rations in the third and fourth years and upon successful completion of the course of four years received a commission in the reserve corps of the army.

Discussion of elective courses in the medical curriculum began among medical educators before 1910, and in this medical school in 1910. Elective courses were offered in the latter part of the first and second years, beginning in 1912-13. These were not optional. Each student was required to select from the offerings a course or courses amounting to a specified number of hours in each year. Usually a student selected a single course because the number of hours required to be selected were fewer than fifty in the first year and fewer than one hundred in the second year. It soon developed that the first-year student had not had enough instruction in the first three quarters of that year to give him much choice. Elective courses in the first year were abandoned after a trial of three years. They were continued in the second year, and in 1917-18 the requirement was 132 hours of electives, over ten per cent of the work of that year. Decrease followed until only forty hours were required in 1919-20. The elective courses in the second year were abandoned in 1925 with little regret by either teachers or students. They were continued in the senior year.

In contrast to the small change between 1910 and 1924 in the curriculum of the first and second years of the course, a revolution occurred in the curriculum of the third and fourth years, beginning early in this period.

A few Cleveland hospitals, beginning in the 'eighties, had accepted two types of assistants, medical graduates who resided in the hospital and were called internes, and medical graduates who resided outside the hospital but came to it daily. These were called externes. A few medical students were accepted in their vacation before the senior year and were called junior externes. In Great Britain junior externes were called clinical clerks. The procedure arose in a few eastern medical schools of assigning senior medical students to certain duties in the hospitals. They were called clinical clerks although the use of this term was not exactly that used in Great Britain.

The development of the clinical clerk system in the Western Reserve medical school was gradual. Individual students were assigned to the study of particular patients in the hospital wards

as early as 1901. The catalogue issued in March 1907 shows assignment of small groups of seniors to work in the wards. Also in this catalogue is the first announcement that students who had completed the work of the third year of the curriculum might be appointed as junior externes during the summer vacation.

The group work in the wards was somewhat increased after Dr. Hoover became Professor of Medicine in 1909, although still occupying a small part of the curriculum of the senior year. This was further extended in 1911-12 under the designation of "ward and bedside work." Sections of one eighth of the senior class were assigned to wards for all daylight hours not otherwise scheduled during a period of four weeks. This arrangement was designated as clinical clerk service in 1912-13. This service was part of the senior work in both medicine and surgery. It might, at the option of the student, be done in the summer vacation before the senior year.

The clinical clerk service, which occupied a total of fewer than 250 hours in 1913-14 and 1914-15, was increased to 540 hours in 1915-16 and to 800 hours in 1916-17. These innovations had increased the scheduled instruction of the senior year to 1788 hours in 1923-24, of which only six per cent was didactic, as compared to 1,052 hours in 1910-11, of which thirty-two per cent was didactic. This was an increase of seventy per cent in the number of scheduled hours and a decrease of sixty-five per cent in the systematic didactic instruction in the senior year.

The clinical clerk service occupied so much of the time of the senior year, even with increase of the number of scheduled hours in that year, that much of the instruction formerly given in the senior year was discarded and other parts were moved back to the third year. These included several of the systematic courses and a large part of the dispensary service. The third year was overloaded, and the logical sequence of instruction was largely lost. Moreover, the third year came to contain a large number of short courses. This confused the student when on some days of the week he received instruction in seven different subjects and at the end of the third year faced final examinations in thirteen subjects.

The new plan caused confusion for several years. Adjustments were made each year in an effort to reduce the confusion. However, there was by no means universal approval of the program of the third and fourth years by either teachers or students. A further major adjustment was made in 1924-25, the description of which belongs to the next chapter.

Sporadic attempts at what was called post-graduate instruction were made beginning soon after 1900. They were intended to afford opportunity for practitioners to acquaint themselves with features of medical education that had arisen since they were students in a medical school. A group of eight laboratory courses was offered in the summer of 1905-06 and references to courses for practitioners in the summer appeared periodically.

Printed announcements of sixteen pages were issued in 1922 and 1923 for courses for graduates in May and June. Forty different courses in clinical subjects were offered, and work could be pursued during one month or during two months. The response was not large although widely advertised.

Fifth Year in Medicine

The number of graduates of American medical schools who took an interneship in a hospital before entering practice steadily increased from 1900 to 1910. A few medical schools devised a plan to require all their graduates to do this by withholding the medical degree until after completion of an interneship. This was called a fifth year in medicine.

The plan had much publicity and aroused discussion in many medical schools. Only a few institutions adopted the plan because no school controlled enough hospitals to furnish an interneship to every one of its students who had completed four years of the curriculum. It was difficult to provide efficient oversight of the instruction of internes in hospitals not controlled by a medical faculty, a difficulty that brought abandonment of the plan by the few medical schools that adopted it.

An interne in a hospital in Ohio was held to be engaged in the practice of medicine, which required a state license. Moreover, graduation in medicine was prerequisite for such a license. Therefore postponement of the medical degree until after the

interneship was impossible in Ohio without change of the statutory law.

The medical faculty of the Reserve medical school, impressed by the public discussion of the subject, sought to devise some plan to accomplish the same end. In 1911 an elaborate report was prepared by a committee of the faculty which involved enrolment in graduate courses, with the essential feature of research and preparation of a dissertation called a thesis.[3] The reward was to be the degree of Master of Arts in Medicine conferred by the trustees upon recommendation of the faculty of the graduate school of the university. A standing committee of the medical faculty was appointed to oversee the work. Announcement of the plan appeared in the catalogue published in March 1912. The response was meager. The only organized course designed for these recent medical graduates was one in experimental medicine; at first this course was one of considerable length, but it was progressively shortened. The total number of graduates of the School of Medicine of Western Reserve University from 1911 to 1921 was 399. Sixteen of these produced some sort of a dissertation, the essential feature, and received the degree of Master of Arts in Medicine.

It was evident that the mountain had been in labor and had brought forth a mouse. The elaborate statement of the fifth year in medicine that had appeared in the catalogues was deleted from the catalogue that appeared in March 1922, and the experiment ended after ten years, with meager results.

Student Attendance

The enrolment in 1910-11 was 170, which was the largest since 1883-84. The candidates for the medical degree of Western Reserve University enrolled in 1910-11 numbered 107, a favorable increase in comparison with ninety-four in the preceding year. The large increase in total enrolment came from the entrance of sixty-three candidates for the medical degree of Ohio Wesleyan University instructed in the parallel curriculum.

Three influences occurring in 1910 increased the attractiveness of the institution for men planning the study of medicine.

The Western Reserve medical school became the only regular medical school in Cleveland; it became publicly known that the endowment was likely to be largely increased; and the report of the Carnegie Foundation for the Advancement of Teaching was published with high praise of this medical school. These influences brought an entering class in 1911 nearly double in size that of 1910. Increases continued, with exception of one year, until the years of the war brought smaller entering classes. The increase was resumed after the war.

The average of attendance for the years 1910-11 to 1923-24 inclusive was 172, the lowest attendance being 152 students in 1920-21 and the highest 191 in 1923-24. Attendance has not dropped below 152 in the thirty-three years since 1910-11 (Appendix H).

The institution had accepted all applicants for entrance who met the entrance requirement even if their record in a college of arts showed them to be only mediocre students. The limited size of the laboratories and the lessened dependence upon income from tuition led the faculty to place a limit on the size of the entering class in 1919.[4] The limit was set at fifty-five students, raised to sixty students two years later and further advanced to seventy-five when the new building was occupied in 1924 with laboratories of greater capacity. The action of 1919 was the first time in the history of the institution that any limitation had been placed on the number of students. Since 1919 the members of the entering class have been constantly selected from a number of applicants in excess of the number accepted.

An idea became prevalent in 1918 that the war would last many years and that the demands of the military services would so deplete the available number of physicians in civilian practice that women would have to assume a considerable part in the practice of the professions. This, together with a diminished number of applications by men for entrance in 1918, brought a decision to admit women to the medical school for the first time since 1883. No women entered in 1918, the first woman student entering in 1919. Fifteen women entered the

first-year classes between 1919 and 1923 inclusive. Five other women entered these classes in advanced standing. Eleven of these twenty women continued to graduation in this school. Six of the twenty transferred to some other medical school and were graduated. Therefore eighty-five per cent of the women entering in this period were graduated in medicine.

Administrative Changes

Two types of administrative changes came between 1910 and 1924. One concerned faculty policy; the other related to personnel and will be first considered. Dr. Benjamin L. Millikin, who had been dean and executive officer since 1900, notified the president in March 1912 of his intention to retire from the offices of professor, dean, and executive officer in June following. The reason for this was failing health. This intention was known to only a few of the medical faculty until the trustees had selected a successor.

The president in June 1912 announced the retirement of Dr. Millikin and the election by the trustees of Dr. Carl A. Hamann as dean and executive officer of the medical school. Dr. Hamann had recently resigned the professorship of anatomy held since 1894, and had been appointed Professor of Applied Anatomy and Clinical Surgery.

The two deans that had served since 1895 had been professors of clinical subjects and the president and trustees believed that this policy should be continued. Although Dr. Hamann had only recently acquired a title in a clinical subject, he had been visiting surgeon under appointment of the medical faculty at two hospitals during fourteen years and had given surgical clinics to medical students during ten years. He had been listed since 1906 as a member of the department of surgery as well as of anatomy. Therefore he had the particular advantage, possessed by no other member of the medical faculty, of having successful recent experience in teaching both laboratory and clinical subjects. He was an excellent and popular teacher, high in the esteem of colleagues, alumni, and students. The appoint-

ment met with universal approval. Further mention of Dr. Hamann will be made in chapter XVIII.

The duties of the secretary-registrar, which included much of the detail of the work of the executive officer, had become so extensive that they were more than could be carried by a member of the faculty who had a heavy teaching load. Decision was reached in 1915 to divide the duties of this office, which had been composite since 1893, and employ a full-time registrar who was a layman, preferably a man with a college degree and educational experience; at this time there were no women students.

Mr. Herbert Allen Hitchcock was appointed registrar in 1915. He was a retired business man, then fifty-three years of age. The connection of his family with higher education was extensive. His father had been the president of Western Reserve College from 1855 to 1871, and two of his brothers and two sisters had been teachers in colleges of arts. He had been graduated from the college of arts of the university in 1884, and had been a trustee of that college for eleven years, from 1894 to 1905. His fine personality and experience led to ten years of excellent service as registrar until he resigned in 1925 because of ill health. The registrar has not been a member of the teaching staff since 1915, and since 1925, with the exception of one year, this office has been occupied by a woman.

A change in the office of secretary of the faculty came in 1916 when Dr. Howard T. Karsner succeeded Dr. Frederick C. Waite, who had been secretary for nine years, and registrar for eight of these years. Dr. Karsner served as secretary for the next eleven years.

The most important administrative changes in the years from 1910 to 1924 were in the presidency of the university. Dr. Charles F. Thwing resigned in 1921 after occupancy of the office for thirty-one years, during which period he had given constant and devoted interest to the medical school. His successor was Dr. James Delano Williamson, a trustee for many years. He was at this time seventy-two years of age and it was recognized that the appointment was temporary. Dr. Robert Ernest Vinson became president in 1923.

The medical faculty had prepared early in 1910 a plan for enlargement of the teaching staff to sixty-nine salaried teachers, for submission to possible donors.[5] A large subscription in October 1910 gave hope of the completion of the million dollar fund. If this succeeded the endowment of the medical school would be nearly doubled. This aroused visions of grandeur in a few of the members of the faculty.

These few members wanted to reorganize the medical school. A committee presented a report which involved increase of more than fifty per cent in individual salaries and a budget of $100,000, which did not include a large expenditure in effect for several years past under an endowment with restricted application. The comparative budget in operation when this report was presented was less than $60,000 and was in part supported by income from a considerable part of the new endowment that had already been paid. The report was passed by the faculty and sent to the president, who presented it to the trustees without recommendation.[6] The trustees took no action.

The budget had been entirely handled by the president and executive officer since 1900. Both were direct appointees of the trustees. These officers were frugal and did not present budgets beyond the available income. A few members of the faculty were dissatisfied with this frugality. In 1914 they originated a plan for reorganization of faculty administration under a set of by-laws which they called a "constitution." The important feature was creation of an executive committee of the faculty which, among other duties, should prepare the budget and submit it to the trustees. Thus financial matters would pass from officers appointed by the trustees to a small committee of the faculty. The adoption of this policy was essentially an attack on the officers.

Two members of the executive committee were elected annually by the faculty. This introduced faculty politics from which the medical school had been free for twenty years. The executive committee continued increasingly to assume powers formerly lying in the faculty as a whole and then exercised only after open discussion.

Changes in Teaching Titles

The trustees adopted in June 1911, upon recommendation of the medical faculty, a change in the familiar title of emeritus professor. This change was not extended to other departments of the university. This plan gave to men who had taught at least fifteen years and had reached the age of sixty years, the privilege of voluntary retirement from teaching, with retention of privileges of research space and equipment in the laboratories and of a limited number of beds in the hospitals. A proposed system of pensions was not adopted.[7] This plan aimed to retain for the institution the interest and limited activity of the older professors.

The new relation was designated by the title of senior professor. The titles of three living emeritus professors were changed to the new form and in the next thirteen years five professors who retired from teaching and continued to reside in Cleveland were appointed senior professors. None of them took advantage of the activities permitted.

The title was misunderstood by medical educators, who considered it to mean that these senior professors were restricted to the teaching of senior medical students. The title was abandoned in 1924 with return to the familiar form of emeritus professor and the titles of the two living senior professors were changed accordingly.

The title of lecturer had been a dignified title in this faculty from 1843 to 1894 with rank next below that of professor. Its dignity was diminished when the titles of associate professor and assistant professor were adopted as grades above a lecturer. Moreover, in many universities the title of lecturer was given to one whose only relation to the institution was the giving of a few public lectures. Therefore, the title in 1910 no longer signified the conduct of a systematic course for students.

The title of associate, which had been used in a few eastern medical schools, was adopted at the Western Reserve Medical Department in 1911 to replace the title of lecturer. The last appearance of the title of lecturer for one teaching throughout the year was in 1912.

The unfamiliar title of associate was not understood and often assumed to be synonomous with the title of associate professor. An associate was next above an instructor and next below an assistant professor. A grade in this position was desirable but the title of associate was unpopular among those who held it. A new designation of senior instructor was adopted in 1916, and given to one who had served at least one term of two years as an instructor. In the early use of this new title it was restricted to full-time teachers. The equivalent title of associate was retained for part-time teachers. More and more part-time teachers came to be called senior instructors until in 1928-29 only two associates remained, while there were twenty-five senior instructors. The title of associate was then abandoned. Thus two unfamiliar titles adopted in 1911 disappeared, senior professor after a use for thirteen years and associate after seventeen years.

A younger teacher in the dispensaries began in the early 'nineties to be called an assistant. This term was changed to clinical assistant in 1910 and in 1917 was replaced by the title of demonstrator for teachers in the dispensaries. Since 1917 the title of assistant has been applied only to those persons who have no teaching contact with students.

Enlargement of the Teaching Staff

The number of members of the teaching staff increased in each year from 1910 to 1924, although in the war years many of them were temporarily absent on military duty. In 1909-10 the total number of teachers, from active professors to demonstrators inclusive, was sixty-seven. The corresponding number in 1923-24 was 149. This increase of over seventy-five per cent was in the grades below that of professor. The number of active professors decreased from nineteen in 1910-11 to sixteen in 1923-24.

The largest increase in any one year was in 1910-11, when eighteen former members of the teaching staff of the Ohio Wesleyan medical college were added to the Western Reserve teaching staff. Three of these taught laboratory subjects in 1910-11 to the second-year class of the Ohio Wesleyan group

of students. These three were paid a salary in that year. The fifteen other teachers accepted the policy in the medical school that clinical teachers should receive no salaries. The last of the Ohio Wesleyan group of students was graduated in 1914. The next year only ten of the Ohio Wesleyan group of teachers remained on the teaching staff and in 1920-21 the number was reduced to one.

Professorial Changes

Dr. Dudley P. Allen resigned his professorship of surgery in June 1910 after seventeen years of successful teaching. He had been one of the leaders in the development of the medical school since 1893. He was active in faculty matters and an excellent teacher. His resignation brought the question of finding as good a teacher to fill the vacancy.

Dr. Carl A. Hamann had been highly successful as a teacher of anatomy, surgical anatomy, and clinical surgery. He had practiced surgery since 1894, and was visiting surgeon appointed by the medical faculty at two of the hospitals used for teaching. He had given surgical clinics at one of these hospitals for ten years. Some of the alumni believed he was the best man for the professorship of surgery, and a group of them, under leadership of a member of the class of 1895, organized a campaign of petition to the faculty and trustees for appointment of Dr. Hamann. Entirely without knowledge of Dr. Hamann or of any officer of the faculty printed petitions signed by some three hundred of the alumni came to the secretary of the faculty by mail and were presented to his superior officers.

However, the faculty nominated Dr. George Washington Crile and he was appointed Professor of Surgery by the trustees. Dr. Crile, after eleven years' teaching at the medical departments of the University of Wooster and Ohio Wesleyan University had joined the Reserve medical faculty in 1900 with the title of Clinical Professor of Surgery. He was not on the staff appointed by the medical faculty at any hospital and had done no scheduled teaching of medical students. He was listed as an associate visiting surgeon at Lakeside Hospital from 1900 to

1910. He is not listed as participating in the curriculum from 1900 to 1910 although he was carried as a member of the department of surgery. Dr. Crile was in the private practice of surgery and was assigned a special part of Lakeside Hospital where he operated. Occasionally a few students were invited to his operating room.

Dr. Crile was a skillful surgeon and had done much research work on clinical problems before 1910, with initiation of several advances in surgical practice. He had published several books and many articles in journals.

He was efficient in teaching small groups at the operating table although not adept in class teaching. The clinical clerk system was extended in 1916, which brought most of the teaching of surgery in small groups. The teaching in the amphitheater under Dr. Crile was reduced to one hour per week, which was conducted by Dr. Crile or his assistants throughout the years of his service as head of the department of surgery.

Dr. Crile served as Professor of Surgery for fourteen years. He was the leader in founding the Cleveland Clinic in 1921, while he was still Professor of Surgery. There he worked actively until a few months before his death in 1943. He was a man of charming personality and achieved world-wide reputation as a skillful surgeon and as a leader in clinical research done by himself and a corps of assistants under his direction. He was an extensive author.

Dr. Joseph Franklin Hobson was appointed Clinical Professor of Surgery in 1910. He was a graduate of the Medical Department of Western Reserve University in 1886, where he had been a demonstrator of anatomy for a short time before joining the teaching staff of the rival regular medical college, where he was Professor of Surgery from 1894 to 1910. He taught clinical surgery to the seniors of the Ohio Wesleyan group of students in 1910-11 and thereafter did no teaching. He died in 1914.

Dr. Roger G. Perkins was promoted to the professorship of hygiene and preventive medicine in 1910. His first teaching position in this institution was in 1899 in a demonstratorship of pathology. The connection of Dr. Perkins with higher edu-

cation began through inheritance. His father was Professor of Chemistry in Union College for thirty-six years. Dr. Roger Perkins was graduated in arts at Union College in 1893 and at Harvard College in 1894. His medical degree was from the Johns Hopkins University in 1898. He first taught pathology and after two years became Lecturer in Bacteriology in 1901. This led to interest in hygiene and preventive medicine. He was promoted to assistant professor, and then to associate professor and took charge of the teaching in hygiene in 1909.

He was an excellent teacher and, with an engaging personality, became a favorite with students and colleagues. His interest extended to public health and he gave meritorious service to the municipal department of public health after his appointment as city bacteriologist in 1912. Through experimentation, much attention was given to the quality of drinking water. Filtration of water brought from Lake Erie was established under his advice. This was followed by chlorinization, of which Dr. Perkins was a pioneer advocate.

Dr. Perkins had many interests and chose to retire from teaching in 1930 at the age of fifty-six years to give attention to some of these. He was made an emeritus professor and removed from Cleveland. His many plans were terminated by his death in 1936.

Dr. Edward F. Cushing, Professor of Pediatrics since 1896, died in 1911. He had been an excellent teacher and had improved the teaching in pediatrics. No successor in the professorship was immediately appointed. Dr. Henry J. Gerstenberger took charge of the subject and was immediately promoted to an assistant professorship. Also at this time Dr. Hamann transferred from seventeen years of service as a professor of anatomy to a newly created professorship in applied anatomy and clinical surgery.

The end of the session of 1911-12 brought the resignation of three professors who had held this title since 1893. All of these resignations were because of ill health. Dr. George Coates Ashmun, an alumnus of the class of 1873, had passed the age of seventy years and resigned after having been a professor for nineteen years. His subjects had been hygiene and preventive

medicine from 1893 to 1909, and from 1909 to 1912 he had given the short courses in medical jurisprudence and medical ethics.

He had served several years as city health officer, which brought him in contact with some of the practical problems of hygiene. He had also been a member of the city council, and when in this position in 1901 was responsible for the creation of a municipal bacteriological laboratory and of the new position of city bacteriologist, to which a professor of the medical faculty was appointed in addition to his teaching duties. The major contribution of Dr. Ashmun to the medical school was fourteen years' occupancy of the office of secretary-registrar, where he much improved the activities of these two offices.

Dr. Benjamin L. Millikin had served as Professor of Ophthalmology since 1893 and as Dean and executive officer since 1900. He resigned in 1912 because of failing health from a chronic ailment which brought his death in 1916. A sketch of his career is postponed to chapter XVIII.

Dr. William Evans Bruner was promoted to a clinical professorship of ophthalmology in 1912 and to a full professorship in 1915. He was graduated in arts at Wesleyan University and in medicine at the University of Pennsylvania in 1891. He served three years in hospitals in Philadelphia. which included one year of dispensary teaching in ophthalmology at Jefferson Medical College.

He came to Cleveland in January 1894 to locate for practice, and on the day of his arrival began to teach in the college dispensary without appointment. He received a minor title in June 1894 and steadily progressed through the grades of titles. He taught during forty-two years, until his retirement from teaching in 1936 as a professor emeritus. He continued to practice and in January 1944 completed fifty years of practice in Cleveland. He was a good teacher, a reliance in the hospitals, a leading practitioner with efficient participation in organized medicine. He has been one of the leaders for fifty years in the development of the Cleveland Medical Library, the School of Medicine, and its affiliated hospitals.

Dr. Henry S. Upson had been a member of the teaching staff since 1889 and Professor of Nervous Diseases since 1893. He was a graduate in arts and in medicine of Bellevue Hospital Medical College in 1884. He had studied in Europe for two years and on his return did some research. He was an efficient teacher in the early years of his service. A long period of ill health caused absences from his teaching which had to be done by assistants. He resigned in 1912 and died within a year.

There has been no professor of this subject in this faculty since 1912. Dr. Charles Walter Stone took charge of the teaching and carried it until his death in 1939. Dr. Stone was a graduate in arts and in medicine of the Johns Hopkins University in 1905. His first teaching in Cleveland was as an assistant in medicine until Dr. Upson asked him to assist in the teaching of nervous diseases in 1909. Dr. Stone was an efficient teacher and became an associate professor in 1925.

The resignations of Dr. Ashmun, Dr. Millikin, and Dr. Upson were followed by appointment of each of them to a senior (emeritus) professorship.

In January 1911 Dr. Carl A. Hamann announced his intention to resign at the end of the academic year from the professorship of anatomy which he had occupied since 1894. A committee of three was appointed to seek a successor. Dr. Macleod was one of the committee. He had come from England nine years before and he wished to bring a man from some English institution to fill the vacancy. Another member of the committee visited the leading American anatomists, seeking their suggestions of the best man available for the vacancy. They were incidentally asked their opinion of selecting some man from Great Britain. All advised against such action.

Several Americans were considered, and also a young man in an English university. The committee was unable to reach a unanimous agreement, and after several weeks the president accepted a majority report of the committee under the misapprehension that it was unanimous and cabled an offer of the professorship to the young man in England.

Dr. Thomas Wingate Todd was elected Professor of Anatomy

late in October 1912 and arrived early in December. He was born in England and was twenty-seven years of age. His medical degree was received at the University of Manchester in 1907, where he was demonstrator of anatomy for two years and then lecturer in the subject for two years. He was a fellow of the Royal College of Surgeons.

He was a man of pleasing personality, highly industrious and capable. Certain characteristics, more evident in later years, appeared soon after his arrival in his claim that he had not understood that Dr. Hamann was to continue to teach surgical anatomy and that the laboratory of histology and embryology was independent both in administration and in its budget.

Dr. Todd soon began research in osteology and it developed that he was much interested in physical anthropology, which was introduced into the instruction to a degree that brought continued complaints from students.

A gift was made by a Cleveland citizen in 1928 to support a study of child-growth. The Brush Foundation was organized under a separate corporation, and Dr. Todd was permitted to take its directorship and install the work in the medical school building. This led to an extensive program of research and a corps of assistants. Dr. Todd chose to give so much attention to this directorship that he increasingly lost interest in the personal teaching of medical students, which came to be done largely by assistants. He was an excellent teacher when he gave attention to this work, and he introduced some new methods in teaching anatomy.

He did extensive research largely in anthropology and published many papers independently or jointly with assistants, and some books. He extended the collections of the anatomical museum which Dr. Hamann had started in the 'nineties. Emphasis was given to osteology, comparative anatomy, and anthropology in this extension. He worked zealously for twenty-six years until his sudden death in December 1938.

Dr. Henry John Gerstenberger was promoted to a professorship in pediatrics in 1913 coincident with establishment of a separate department in this subject. He was a native of Cleve-

land and completed the course in a college of arts which did not confer degrees. He was a graduate of the Medical Department of Western Reserve University in the class of 1903. He was in charge of the tuberculosis dispensary for one year and then began teaching pediatrics in 1907. He continued teaching this subject for thirty-seven years.

Dr. Gerstenberger is an excellent teacher and has developed a department of high efficiency. He has done much research and is recognized as a leader in pediatrics in the United States. He has stimulated many of his assistants in research and has trained a large number of men for practice of pediatrics, so that this subject has a leading place in the hospitals and medical practice of Cleveland.

Three professors resigned in 1914. Dr. Hunter Robb, Professor of Gynecology for twenty years, resigned, retired from practice and left the city. Dr. William Henry Humiston, who had held an associate professorship in this subject since 1896, was promoted to a clinical professorship, in which he served until 1925, when he resigned on reaching seventy years of age and was made an emeritus professor.

Dr. William Thomas Corlett resigned from the professorship of dermatology and syphilology, which he had occupied since 1893. He had taught at the Medical Department of the University of Wooster for eight years before he began his twenty-seven years of service in this medical school. He began practice in Cleveland following study in Europe and soon became a leader in his specialty, both locally and nationally. He was active in the American Dermatological Society and served as its president. He is a member of the British society in his specialty and Licentiate of the Royal College of Physicians. He published one book on dermatology and contributed to several American textbooks in this subject, as well as contributing papers to leading American and foreign journals. He has continued his scholarly work in the more than thirty years that he has been an emeritus professor. He published in 1935 *The Medicine Man of the American Indian and his Cultural Background,* a pioneer work in this field that represents several years of re-

search with travel in search of material in both North and South America. Other books, both in prose and poetry, have come from his pen. His interest in medicine, the medical school, the Cleveland Medical Library, and scholarship continues now in the tenth decade of his life.

Dr. William Travis Howard Jr. had been on the teaching staff for twenty years and Professor of Pathology, Pathological Anatomy, and Bacteriology for nineteen of these years. He resigned in 1914 and left the city. His career has been outlined in the preceding chapter.

Dr. Howard Thomas Karsner was appointed Professor of Pathology in 1914, a simplification of the previous form of the title. He began service in November 1914. He had been graduated at a school of pedagogy and then in medicine at the University of Pennsylvania in 1903. He was a demonstrator of pathology at the University of Pennsylvania from 1908 to 1911 and Assistant Professor of Pathology at Harvard Medical School from 1911 to 1914. He has been an excellent teacher and has published much research and a successful textbook of pathology. His service in Cleveland has included administrative duties. He was secretary of the faculty from 1916 to 1927.

The department of pathology is the liaison between the laboratory departments and the hospitals and clinical departments. Dr. Karsner has performed the many duties related to cooperation of the medical school and the hospitals with success.

The only changes among the professors in 1915 were the promotion of Dr. Humiston to a clinical professorship, already mentioned, and the change of the title of Dr. Bruner to Professor of Ophthalmology.

Only one change of professors came in the years of the war, Dr. Macleod resigned the professorship of physiology in 1918, after fifteen years of occupancy. Dr. Macleod had a charming personality and was a favorite teacher. He had done much research, mainly in biochemistry. His relation to his colleagues began to change in 1913, and during the next five years he became increasingly critical of many things, the president, the

dean, the trustees, several of the professors, and from 1914 to 1916 of the entire American people for not entering the European war.

All this led to unhappiness, increased by some incidents during the war. In 1916 he began to seek a position under the British flag and when offered the professorship of physiology at the University of Toronto in 1918 he promptly accepted it. In his new position he did meritorious research including participation in the discovery of insulin, for which he shared the Nobel Prize in Medicine in 1923. However, his critical attitude continued in his new position and he resigned in 1927 and was appointed professor of physiology at the University of Aberdeen—his alma mater—where he served until his death in 1935.

Dr. Carl John Wiggers was elected Professor of Physiology in 1918. He had received the degree of Doctor of Medicine at the University of Michigan in 1906, which was followed by occupancy of an instructorship in physiology until 1911, when he went to Cornell University, first as an instructor and then as an assistant professor of physiology for five years.

His maturity and his teaching experience of twelve years in the subject made him an excellent choice to fill the vacancy. He has been a teacher of high efficiency in the Western Reserve medical school, an able administrator of his department, and has done much research of high quality, resulting in publication of many articles in scientific journals and of several books.

Dr. John H. Lowman, Professor of Clinical Medicine and Medical Ethics, died in January 1919 at the age of seventy years. He entered the Red Cross early in the first World War and had service overseas in an advisory capacity. He died while still in service.

Dr. Lowman had been a professor in the faculty since 1881, being one of the eight men who came from the faculty of the Medical Department of the University of Wooster when the faculties were united. He was a leading practitioner for nearly fifty years and after a time gave especial attention to respiratory

diseases. His interest led to a local organization to combat tuberculosis. He established a dispensary for victims of this disease at the medical college building in 1904. This led to emphasized attention to this disease at the municipal hospital and finally to a separate hospital in the suburbs. He was the pioneer in Cleveland in the war on tuberculosis, a fact recognized by the naming of a wing of City Hospital devoted to tuberculosis, as the Lowman Memorial Pavilion. His teaching was restricted to a short course in medical ethics after 1916.

The difficulty in securing medical officers in the war led the War Department to institute a course in military medicine in several medical schools. These courses were taught by medical officers of the army detailed to the duty by the Surgeon General of the Army, usually for a period of four years.

Therefore, the faculty and trustees did not select these teachers of military medicine, but when a man was chosen by the Surgeon General of the Army, the faculty has recommended and the trustees have appointed him as Professor of Military Science and Tactics in the School of Medicine of Western Reserve University. These military men have restricted their activity to teaching the course of which they are in charge and have taken no part in other activities of the medical school.

The first of these army men to join the faculty was Dr. Thomas Ludlow Ferenbaugh, who was appointed in 1920 and remained until 1925. He was a native of Ohio, a graduate in arts at Kenyon College and in medicine at the Johns Hopkins Medical School in 1905. He was a major in the medical corps of the army when appointed.

The faculty contained nineteen active professors in 1910-11. Three of these died in the next ten years and six resigned. One professor resigned one professorship and was appointed to a new professorship. These events created a total of ten vacancies. Four of these were not replaced by professors. One new professorship was created. This resulted in a net loss of three in the number of professors in this period. Sixteen professors on the faculty in 1923-24 included four men who had been professors before 1900, four who had become professors between

1900 and 1909, four who had been promoted from lower grades after 1909, and four who had first joined the teaching staff after 1911.

Under new bylaws of the Board of Trustees giving to each faculty the decision as to what grades should admit to the voting faculty, the medical faculty admitted all associate professors in 1921. In 1923-24 there were nine associate professors; therefore the voting faculty included twenty-five members.

Financial Matters

Dr. Millikin in his second report as dean in 1902 asked the trustees to increase the endowment by an additional million dollars. Reference to this request is found in nearly every report of the dean after 1902, and is especially emphasized in the report of June 1910. No concerted endeavor for increase of endowment was made until 1907, when the trustees began an effort to raise a "million dollar fund." Mr. Howard M. Hanna subscribed one fourth of the amount in 1908 and paid it in 1909. This was additional to his gifts from 1897 to 1906, which totaled $220,000.

The trustees in February 1910 applied to the Rockefeller Foundation for a subscription equal to the amount given by Mr. Hanna. The officers of that foundation replied that the support of medical education was not at that time in their field.[8] It appeared that the completion of the million dollar fund was far in the future.

Two events favorable to the Medical Department of Western Reserve University occurred in the summer of 1910. The consolidation with the Ohio Wesleyan medical college made the Western Reserve institution the only regular medical school in Cleveland and the weak condition of the local homeopathic medical school promised that soon there would be only one institution teaching medicine in Cleveland. The report on medical education of the Carnegie Foundation for the Advancement of Teaching was published in 1910, showing the position of the Western Reserve medical school as high among all schools of the country. These events immediately preceded a large gift,

although it is not known to what extent they were influential.

A letter was received in the office of President Thwing early in September 1910 saying that although the Rockefeller Foundation under its limitations could not make subscription for support of medical education in Western Reserve University, Mr. John D. Rockefeller was considering making a personal contribution.

President Thwing was en route from Europe and could not be reached; it was before communication by radio was invented. Dr. Waite, as an officer of the medical faculty, took the letter, went to New York and met President Thwing as he came down the gang-plank from the steamship. Dr. Thwing visited the office of the Rockefeller Foundation the next morning and came away with assurance of a contribution, confirmed by official letter of October 4, 1910. Mr. Rockefeller agreed to give $250,000 if the remaining $750,000, including the amount already received from Mr. Hanna, were subscribed not later than December 31, 1911 and paid in full not later than December 31, 1912.[9]

The subscription by Mr. Rockefeller left $500,000 to be secured in less than fifteen months. This was nearly as much as the total of all endowments received in fifteen years from 1892 to 1907. The subscription had been completed, lacking about $41,000 on December 28, 1911, when four men who had already made liberal subscriptions gave this remainder. Public announcement was made on December 31, 1911 that the subscriptions to the million dollar fund had been secured. The entire amount was paid before December 31, 1912.

The additional endowment did not increase the income of the medical school as much as would appear. Several men who had annually contributed to the budget during several years capitalized their annual gifts with the understanding that they should not thereafter be asked for annual subscriptions.

The million dollar fund was contributed by thirty-two individuals. Mr. Howard M. Hanna, Mr. John D. Rockefeller, Mr. Samuel Mather, and Col. Oliver H. Payne gave a total of $740,000—nearly three fourths of the total—in contributions

Carl August Hamann, Professor, 1894-1930; Dean, 1912 to 1928

of $100,000 or more. Mr. Charles W. Bingham, Mr. Charles F. Brush, Mr. Joseph P. Chamberlain, Dr. George W. Crile, Mr. William E. Cushing, Mr. Henry G. Dalton, Mr. Leonard C. Hanna, Mr. William G. Mather, Mrs. J. C. Morse, Mr. David Z. Norton, Mr. Earl W. Oglebay, Mr. William R. Palmer, Mr. Alfred A. Pope, Mr. Ambrose Swasey, Mr. Washington S. Tyler, and Mr. Jeptha H. Wade gave a total of $248,000 in amounts from $5,000 to $6,000. Ten of these twenty large contributors were trustees of the university. Twelve other individuals gave in amounts of $2,500 or less.[10]

Endowments received between 1912 and 1924 were not extensive, consisting of one gift of $10,000 and four of $5,000 each, all for special purposes. The total amount of endowment on June 30, 1917 was $1,500,000.

The end of the year 1922-23 is used in this paragraph because the new building and new equipment were not as much involved in the financial statement as they were a year later. The financial position of the medical school on June 30, 1923 included endowment of $2,026,000, equipment inventoried at $155,000, books worth $53,000, land appraised at $248,000 and buildings with an estimated worth of $289,000 making total assets of $2,771,000.[11] The estimated value of the land included the site for the new medical building. On June 30, 1920 the value of the real property at St. Clair Avenue and East Ninth Street was set at $371,900, of which $56,000 was the value of the land. The value of the three buildings was itemized. For two of them the figure was the known original cost. The laboratory of experimental medicine was listed at $46,900, which included cost of many repairs since its erection in 1908.[12] The endowment included an item of $385,000 given for the new building and therefore not a continuing source of income. The increase of the productive endowment of $141,000 above that of six years before was not due to additional gifts but to a change in the system of auditing by which securities were computed at their market values instead of their par values.

The inability to sell the buildings at East Ninth St. and St. Clair Avenue, after they were vacated in 1924, brought their

demolition in 1929 to save taxes and to make the land vacant so that it could be made to yield an income to cover taxes. Therefore the estimated worth of the buildings in 1923 became practically a total loss.

The annual expenditure of the medical school in 1911-12 was $45,000. This increased each year until it passed $100,000 in 1918-19. The comparative expenditure in 1922-23 was approximately $188,000.[13] This shows the great expansion of the activities of the institution in eleven years, largely because of appointment of more full-time teachers and increase of the salary scale.

The last increase of tuition had been made in 1909, following a period of stability for eleven years. Annual tuition had been $150 for ten years, when it was increased to $200 in 1919, and two years later was increased to $250 in 1921. The enrolment increased between 1910 and 1924 as well as the annual tuition. This brought an income from tuition in 1923-24 of over $48,000 compared to slightly more than $21,000 in 1910-11.

Effects of the War

The war did not affect the medical students already enrolled although it caused a diminution in the class entering in 1918. Three enthusiastic students withdrew to enter military service. The organization of the Medical Enlisted Reserve Corps permitted able bodied students to enlist as privates and remain inactive until they should complete their medical course in preparation for commissions in the medical corps of the army. Students who did not make progress in this preparation were called to active duty as privates.

In the fall of 1918 the Student Army Training Corps replaced the earlier organization, and medical students were put into uniform and received the pay of privates. Some military drill and other military instruction were added to the medical curriculum.

The effect upon the teaching staff was greater because many of its members accepted commissions in the army and were given leave of absence from their teaching positions. The uni-

versity paid the difference between army pay and the university salary in the case of full-time salaried teachers.

The probability that the United States would enter the European war led to the organization of a base hospital unit at Lakeside Hospital early in 1916. Dr. George W. Crile, Professor of Surgery, was the leader in this effort. A considerable number of the teaching staff enrolled in this unit, including the professors of medicine, pathology, and surgery.

Declaration of war came on April 6, 1917 and exactly a month later the unit left Cleveland with twenty-seven officers, 159 enlisted men and civilian employees, and sixty nurses. The unit, under the name of Base Hospital Number Four, sailed from New York on May 8, landed in England on May 18, and in France on May 24. It was the first organized unit of the American Expeditionary Forces to reach France.

A hospital of 1,200 beds was established near Rouen, France, and continued until demobilization on January 23, 1919. However, some of the medical officers were not discharged from the army until May 1919, after having been in active service during two years.[14]

The report of the dean of the medical school in June 1919 stated: "When the armistice was signed in November, there were fifty-three stars on the service flag, fifty for men in the instructing staff and three for students."[15]

A university publication listed forty-five of the medical teaching staff in service.[16] This list omits three names recorded elsewhere. Twenty-two of these forty-eight men had overseas service.

Nine of the sixteen active professors served in the war. Dr. William E. Bruner, Dr. Frank E. Bunts, Dr. George W. Crile, Dr. Charles F. Hoover, Dr. Howard T. Karsner, and Dr. Frederick C. Waite were officers in the United States army. Dr. Thomas W. Todd was an officer in the Canadian army. Dr. John H. Lowman was Medical Director of the Red Cross Tuberculosis Commission in Italy, and Dr. Roger G. Perkins was a member of the Red Cross Commission in Rumania.

The combined number of associate professors, assistant pro-

fessors, and associates at that time was thirty-three. Fourteen of these were in war service. Therefore twenty-three of the forty-nine teachers above the grade of instructor served in the war and were absent from Cleveland. This presented a serious problem in maintaining the instruction.

These men were not all absent throughout the war nor all at the same time. Some were permitted to resign their commissions before the war was over to return to their teaching and others did not enter until the second year of the war.

The men below professors and above instructors in war service were: Dr. Richard Dexter, Dr. Arthur B. Eisenbrey, Dr. George B. Farnsworth, Dr. Frederick C. Herrick, Dr. John M. Ingersoll, Dr. William E. Lower, Dr. David Marine, Dr. Harold O. Ruh, Dr. Roland E. Skeel, Dr. Charles W. Stone, and Dr. Harry R. Wahl as officers in the United States Army. Dr. John Phillips and Dr. William H. Weir were officers in the Canadian army and Dr. Paul J. Hanzlik was in Red Cross service in Russia and Rumania.

Many members of the teaching staff who were not absent from Cleveland contributed service in the war. Dr. Carl A. Hamann, the dean, and several others were active in the draft boards; research problems assigned by the army were carried on in some of the laboratories. The absent teachers returned after the war and the routine of instruction had returned to normal by the end of the session of 1918-19.

Renewal of Relation with the Dental Department

Mention has been made of withdrawal in 1903 of all salaried teachers in the medical school from teaching dental students. This had a serious effect upon the dental department. It became a private enterprise in 1906. It continued to carry the name of Western Reserve University under a loose affiliation and the trustees of the university conferred the dental degree upon students who had completed its course.

The reputation of the dental department was of interest to all other departments of the university, especially to the medical department. The facilities possessed by the dental de-

partment for teaching the medical sciences were meager. Dr. Todd, who had come to the medical faculty long after the events of 1903, was sympathetic and undertook the teaching of dental students in anatomy in 1914-15. The teaching of dental students in the laboratories of the medical school by instructors and under direction of professors was extended in 1915 to the subjects of bacteriology, chemistry, histology, and physiology.

The trustees of the university in 1916 decided to resume the control of the dental department which they held prior to 1906. The transfer from the stock company to the university began in January 1917, and in September 1917 a new dean appointed by the trustees took control with a reorganization of the faculty.

A new building was occupied in 1917. Its location was adjacent to the site for the future new building of the medical school, and these two departments have worked in close collaboration since 1917. The dental department was rehabilitated between 1917 and 1921. A period of advance from 1921 to 1927 brought the dental department to the standards of the better dental schools of the country, and since 1927 stabilization has steadily progressed.[17]

The New Building

Conditions in the medical building were already crowded and organization of another laboratory department was in prospect when the faculty asked that consideration be given to remodeling of the building to cut up the little used amphitheaters into floors for laboratories.[18] The joint opinion of an architect and contractor that the result would be rooms with little natural light and that the cost would be at least $75,000 brought an end to this plan.

The laboratory professors then asked for a new building. The three buildings in use were not only crowded but deficient in natural light and closely surrounded on two sides by commercial buildings, in some of which manufacturing was in progress causing much smoke and dirt.

I was then secretary of the faculty, and at the direction of my superior officers, secured from each professor his ideas as to space and arrangement needed for teaching and research in the subjects under his charge. I combined these opinions and drew the first sketch plans in 1912. An architect elaborated them and gave a rough estimate of cost. The known friends of the institution had recently subscribed liberally for endowment then in process of being paid. Therefore the necessary funds for a new building were not in immediate prospect.

Nevertheless the question of a site was discussed. The land then occupied was unsuitable because of lack of natural light and the area owned was too small. The report of the dean of June 1913 said: ". . . plans for new buildings are under discussion and it is hoped that in the near future such increased facilities will be available."[19]

A location on the south side of Lakeside Avenue facing Lakeside Hospital was selected.[20] This land was partially vacant and partially occupied by old wooden buildings of little value. The trustees bought part of this land and took options on the rest late in 1913. A few months later a new factor entered the question. Railroad executives began discussion of a new union terminal station. One of the sites suggested would require a large part of the area then occupied by Lakeside Hospital. If this site were chosen the hospital would have to move to a new location.[21]

A composite committee of seven representing Lakeside Hospital, the School of Medicine, and the Babies Dispensary and Hospital (the last then contemplating building in a separate location), was appointed. A subordinate committee of the medical faculty was also appointed. This consisted of Dr. Carl A. Hamann, the dean, and Dr. George W. Crile, Dr. Roger G. Perkins, Dr. Torald Sollmann, and Dr. Frederick C. Waite, professors.

The president in his report of June 1915 said: "The project of rebuilding in the School of Medicine and in Lakeside Hospital has been delayed by the commercial and industrial depression and by the uncertainties caused by the European war. The

inability of both the faculty of the school and of the medical staff of Lakeside Hospital to come to a unanimous conclusion regarding the best location for these institutions . . . has contributed to the delay."[22]

This reference to lack of unanimous conclusion refers to a discussion on location, indulged in not only by the professors but by junior teachers who hoped sometime to become professors. Many locations were suggested and finally reduced to three: a site on the shore of Lake Erie seven miles east of the occupied locations, an area in a suburb on high ground, and a parcel of land adjacent to the university compus. Each advocate of a favored site evolved arguments for his choice and against the rival sites. Wherever teachers met this was the subject of discussion until the war became a more absorbing topic. Meanwhile the railroads had abandoned their plans for a union station and there was no immediate necessity of removal of the medical school and hospital.

Little was heard of the new building during the years of the war. However, the trustees reached a decision and chose the site near the university campus. Five of the trustees personally bought the land to hold it until such time as the institutions should be ready to build.

Architects were employed in 1916 to draw plans for the medical school building. They were first published in September 1919 and were then ready to submit for estimates of cost.[23] These plans were essentially the same as those of which I made the first sketch draft in 1912.

During more than two years the members of the faculty continued to speculate as to when the new building would be erected, but no action was taken. In a meeting of the trustees in February 1922 one of the trustees remarked that he saw no prospect of securing the money to erect the new medical building, although all knew that it was much needed. Then he remarked: "I will authorize the building committee to go ahead and erect the building, and I will pay for it." This generous trustee was Mr. Samuel Mather.

Contracts were let and excavation began in August 1922.

The cornerstone was laid in April 1923, and by June 30, 1923 nearly $800,000 had been paid to the contractors. The building was near enough completion so that the furniture and equipment were moved from the old buildings beginning in the spring of 1924. A description of this new building is postponed to the next chapter.

In connection with the erection of the medical school building it was necessary to build a power and heating plant to supply the medical school building and large enough to care for the proposed hospital buildings to be erected near it. The cost of the medical school building and its equipment, together with the power and heating plant, was approximately two and a half million dollars, which Mr. Samuel Mather personally paid. This was by far the largest gift received from any one individual in the history of the university. Mr. Mather later added other gifts.

Summary

No changes in the entrance requirements and fewer fundamental changes in the curriculum were made between 1910 and 1924 than between 1893 and 1910. The curriculum of the first two years of the medical course changed little, that of the last two years was much changed. Experiments in the curriculum, such as elective courses in the first and second years of the course, and the fifth year proved to be only temporary. The instruction of an additional student body from the Medical Department of Ohio Wesleyan University was carried through without difficulty.

The official name of the institution was changed in 1912 from the Medical Department of Western Reserve University to the School of Medicine of Western Reserve University in conformity with increased practice in other American medical institutions.

The administrative changes were important, especially the resignation of President Charles F. Thwing in 1921. Two of the professors who had given long service died while yet actively

teaching. Five professors resigned after having taught in the institution for twenty or more years. To some of the professorships came new men who were destined to have large parts in the future progress of the school.

The increase in endowment in the early part of the period permitted a larger teaching staff with improvement in instruction in some places and extension of research. However, further increase in endowment expected by some, did not come.

A survey of the whole period shows steady advance, in spite of the interruption caused by the war. Student attendance increased, bringing the enrolment at the end of the period up to the highest point in over seventy years (Appendix H).

The one thing that continued in the minds of all connected with the institution during these fourteen years was a new building to replace the one planned and built in an earlier era of medical education, an era that had been completely outmoded. When it was announced that a generous friend had provided the cost and that the medical school would soon enjoy unsurpassed facilities for teaching and research, the spirits of members of the faculty that had drooped during years of unfulfilled hope, rose to a high plane of satisfaction, and former hypothetical plans were revised to meet reality.

I have chosen in writing this history to end each chapter at the point of some event that affected the fortunes of the institution: the beginning of the Civil War, the union of the faculties that was expected to terminate educational rivalry, the withdrawal of a group of men that ended a prevalent dissension in the faculty, and the final successful elimination of a rival regular school by the consolidation of 1910. Each of these events promoted progress of the institution but none had as great an influence upon the fortunes of the medical school as when the faculty in the summer of 1924 bade adieu to the old dingy building of outmoded architecture and arrangement to move to a building of adequate size, modern arrangement, and almost luxurious equipment.

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XVII

MATURITY: 1924-1943

THIS CHAPTER is devoted to events in the School of Medicine of Western Reserve University from its eighty-first year until it reached the age of one hundred years. These years in the life of a man would be termed years of senescence. An institution is of slower growth and of longer life than a human being and its maturity comes after a longer interval. Events of the last ten years have shown that the institution still possesses the power of recuperation and no symptoms of senility have as yet appeared.

These nineteen years have included enjoyment of a new and commodious building, increase of clinical facilities, experiments in the curriculum, and much more attention to research, made possible by better facilities. Attendance of students has increased, as have also the number of teachers. Several professors have died and others have resigned, and there have been replacements by men who in many cases have come from other cities. During the first five years of this period, expansion of the university was the dominant note, accompanied by large capital and operating expenditures with incurrence of capital indebtedness and operating deficits in anticipation of prospective gifts which were not received. Then came years of national economic depression that required violent retrenchment. The final ten years have been those of slow and painful recovery. Finally in the last year of the century, revolutionary changes in educational policy, probably temporary, have been made necessary by a state of international war.

THE NEW BUILDING

The desire for a new medical school building was first formulated in 1912, as has already been mentioned. In 1915 the trustees selected a plot of land adjacent to the university campus as the site for new buildings for the medical school and the associated hospitals. The area of this plot was about twenty

acres and was acquired in 1915 at a cost of $423,400, the money being given by five men who were trustees of both the university and the hospitals.[1] Coolidge and Shattuck of Boston, who had planned the new set of buildings of the Harvard Medical School, were engaged as architects in 1916.[2] The plans of the architects were first published in 1919.[3] These provided for a building situated in the southern portion of the plot acquired by five of the trustees in 1915.

The building was oriented parallel to neighboring streets and therefore faces north-northwest. The plans were in their major relations the same as the preliminary plans of 1912 for a building in another location, although somewhat enlarged in size. One feature in the plans of 1912 was eliminated. This was a central library, which was later discarded for smaller departmental libraries. A feature in the plans as published in 1919 was discarded before the building was completed. This was a dining room and cafeteria, with the necessary service rooms, which was to be located in the basement for use of students and teaching staff.

Ground was broken on August 14, 1922; the cornerstone was laid on April 18, 1923, and the building was dedicated on October 9, 1924. The building is of classic design with Greek detail, the outer walls faced with buff brick and the trimmings of limestone. The building has a frontage of 306 feet, with wings from each end extending southerly. The outside length of the west wing is nearly 174 feet and that of the east wing nearly 159 feet. Each wing is sixty feet wide. The structure has four stories completely above ground, a basement half above ground, and a sub-basement. The height from ground level to the cornice is seventy-six feet. The plan is on the unit system, seventy-eight units on each floor. Each unit is twenty-two by fourteen and a half feet in floor area. The area of each floor is 32,000 square feet, three-fourths of an acre. The total floor area of the six floors is 192,000 square feet, four and a half acres. There are 294 rooms and 1,078 windows. The cubic content of the building is 2,390,000 cubic feet. This is two and a fourth times the cubic content of the three buildings on the old site

at St. Clair Avenue and East Ninth Street. The comparative available floor area is greater, over three times, because the amphitheaters and hall in the old main building extended through three floors.

At the time the building was erected there were eight laboratory departments, counting the independent laboratories of experimental medicine and of histology and embryology as departments. Each department was assigned approximately half of one floor except histology and embryology, which had less than this area. Each department was located entirely on one floor except pathology, which occupied parts of two floors.

The assignment was: on the first floor, administration, anatomy, and part of pathology; on the second floor the remainder of pathology, histology and embryology, and bacteriology and hygiene; on the third floor experimental medicine and pharmacology; and on the fourth floor physiology and biochemistry. This occupancy has been changed by the removal of pathology from the building in 1929 to a separate building, and by the removal of experimental medicine in 1931 to the hospital building. The Brush Foundation in 1928 came to occupy the space in the basement originally assigned to a dining room and cafeteria.

Each department, except experimental medicine, had a laboratory for teaching classes. Four of the eight departments had their own lecture rooms. Experimental medicine shared a lecture room with pharmacology, and biochemistry shared one with physiology. There were six separate departmental libraries and one used jointly by biochemistry and physiology. The departments of anatomy and pathology each had a large museum room. Each department had several private rooms for members of its staff and also several service rooms. The equipment was all that could be asked. After the equipment was in place, Mr. Samuel Mather, with his usual generous spirit, asked the heads of all laboratories if there was anything more desired. Some of them had not thought of equipment that others had secured and a supplemental lot of equipment was provided to meet these requests.

Various statements have been in praise of this building. One was that it is the largest single building occupied by any medical school in the United States. At the time it was occupied it was the last word in facilities for medical teaching and research. In the entry on the right wall is a bronze tablet testifying the gratitude of trustees and faculty for the magnificent gift. This reads: "This Building is the Gift of a Constant and Bountiful Benefactor of the University, Samuel Mather."

A similar bronze tablet, thirty by forty-five inches, was erected on the left wall of the entry in 1937 in gratitude to Mr. Woods, who had similarly given to the university a medical school building in 1886, which was occupied until 1924. This tablet reads: "John Lund Woods 1821-1893, Pioneer in Benevolence to Medical Education. Donor of the Second Building in 1886 and of the First Endowment in 1892 of the School of Medicine of Western Reserve University." This is the only instance where two local laymen have personally given to the medical department of a university two complete buildings in succession.

The medical school building is connected by underground passageways with all the adjacent hospital buildings, and with two service buildings. In the rear of the medical building between its wings an animal house was built with adjacent paddocks. This was less than six years old when it was demolished and a larger building of four stories erected.

The proposal for a new building in 1912 brought discussion as to whether the plan should be for a single building housing all the laboratory departments, or for a series of buildings or "institutes." Architects stated that a series of buildings would increase the cost of construction and also the cost of subsequent maintenance. Also it was the opinion that separate buildings would diminish the solidarity of the institution. Therefore a definite agreement was made that all laboratory departments should be located within one building.

However, four years after the new building was occupied, a separate building for the pathological department was erected in 1928-29 and dedicated October 7, 1929. This Institute of Pathology building was a gift of the General Education Board.

Its cost was approximately $750,000. The location is adjacent to the main building of the university hospitals and is connected by an underground passageway with the medical school building.

The building faces Adelbert Road and forms one side of the court of the main hospital. It is four stories in height and 160 feet by 58 feet in area.[4] It serves not only for the teaching of pathology to medical and dental students but also for the pathological activities related to the hospitals. It has extensive provision for research which has much increased in this department since the building was occupied.

Clinical Facilities

The expansion of clinical facilities in these nineteen years arose from construction of additional wards at Charity Hospital and at City Hospital, and from erection of new buildings at the University Hospitals occupied progressively from 1925 to 1931.

The use of Charity Hospital lessened because sufficient teaching material was available at City Hospital and the University Hospitals. Also influential in this diminution was the resignation from the faculty of three professors, and the death of another, all of whom had taught medical students at Charity Hospital since 1894. Dr. William H. Humiston resigned in 1925, Dr. Frank E. Bunts in 1928, and Dr. John P. Sawyer in 1932. Dr. Carl A. Hamann died in 1930. The loss of these men much reduced the ward and amphitheater teaching at that hospital. Dispensary teaching has continued.

These several hospitals and their relation to teaching have been considered in chapter XI. The accretions to the clinical teaching field are apparent in comparative statistics. In 1924 the total number of beds in the hospitals affiliated with the medical school was a little over 2,000; in 1943 the number had increased to over 2,700 beds. In 1924 the dispensary service available for teaching was over 20,000 patients, with over 100,000 annual visits; in 1943 this was increased to over 300,000 annual visits.

The School of Medicine of Western Reserve University controls clinical teaching facilities, both of ward beds and dispensaries, which cover all the usual fields of medicine and are more than adequate for efficient clinical instruction of less than 150 students in the third and fourth years of the curriculum, to which years clinical teaching is restricted.

Curricular Changes

In the nineteen years considered in this chapter several experiments with the curriculum were made, most of which have been abandoned. The electives in the second year, in use since 1912, were abandoned in 1925. Ten years later they were tried again under the title of "supplementary courses." Two courses were offered, of which one or the other had to be taken. One year of trial brought abandonment; most of the students selected the easier course.

Some members of the faculty had long contended that more liberty was needed in the curriculum of the first and second years. In 1935-36 the required number of scheduled hours in both of these years was reduced by twenty per cent. This required abandonment of one course considered valuable by the students, and reduction of the amount of instruction in all other required courses. A considerable number of optional courses were organized, in which the instruction omitted from the required courses was included. The schedule had been freed from two half-days in each week and these optional courses were offered in that time. The plan of offering optional courses had been tried twenty years before and had failed, but a considerable number of men had joined the teaching staff since that failure and wanted to try it again.

One use of the free time was to be for work in the library, but the libraries showed no increased attendance and the optional courses were little patronized except after insistent urging on the part of teachers trying to explain to students how essential was the particular course under consideration, or how easy it would be. Investigation of the use of the free time showed that for the majority of students it was not used profitably.

After a trial of five years the required courses were largely restored, and the optional courses were much reduced in number. The number of required hours in the schedule was not fully restored. Before the experiment there were slightly over 1,100 required hours in each of the first two years; afterward only about 1,000 hours.

An interval of twenty years had not changed the fundamental fact that most professional students do not enrol in optional courses when offered. They are preparing to practice a profession and are willing to take the required courses that experienced educators consider necessary to fit them for the practice of that profession. However, when a course is made optional or elective, it is thereby identified as not essential, and students do not take optional courses except in comparatively few cases, and they are much influenced in choice of an elective course by whether the course has the reputation among students of being difficult or easy.

In a college of arts where students are planning for varied careers the matter of electives is different than it is in a professional school where all students are preparing for the same career. Two extensive efforts in this medical school with both optionals and electives have largely failed.

Some optional courses were continued after 1940. These were of three types; short courses in the pre-clinical years, optional clinical clerkships in the summer months, and research courses. In 1941-42 twenty-six optional courses were offered, the majority of these being clinical clerkships in the summer vacation or research designed for students of the graduate school equally as much as for medical students or medical graduates. The accelerated program has reduced the systematic optional courses to six, all short didactic courses. Optional courses have practically disappeared and elective courses have entirely vanished.

The introduction of the clinical clerk system into the curriculum has been described in the preceding chapter. It had grown until in 1923-24 the schedule of the fourth year contained 1,788 hours, of which forty-eight hours were elective. In 1924-25 this was reduced by forty hours, of which the reduction

of electives accounted for twenty-four hours. This amounted to fifty-eight scheduled hours per week for the thirty-two weeks of instruction in the session. A schedule of ten hours for each week-day leaves little time to a student for private study.

Senior students had for several years been permitted to do part of the clinical clerk service in the summer vacation before the senior year. Many students took this option in order to secure free time at the end of the senior year to review for the examinations for the medical degree and for the license to practice.

A radical change was made in the fourth-year curriculum and schedule beginning in 1925-26. The third year was shortened by two weeks so that examinations would be completed by June 1. The senior year was increased from eight months to eleven months without vacations, to extend from July 1 to May 31. This increased the number of scheduled hours to 2,264, nearly double the number in any other year of the curriculum. However, it reduced the number of scheduled hours in each week from fifty-eight to forty-seven hours. About sixteen per cent of this schedule was marked as elective. The election permitted the student to choose his clinical clerk service in two of the months both as to subject and the hospital at which it was carried out.

The senior year of eleven months had two major disadvantages. Although the senior students had no vacation in the summer months, the older teachers continued to take their vacation of two or three months, with the result that the instruction in the early months of the senior year was conducted largely by younger teachers and in some cases by internes who had received their medical degrees only two weeks before they began to teach the seniors.

Nearly every graduate took an interneship, which usually began on July 1. Therefore from the beginning of his third year until the end of his interneship—a lapse of thirty-three months—the student had only one month of vacation, the June between his third and fourth years. The month of June at the end of the senior year was largely occupied with the examinations for the medical degree and the license to practice.

These disadvantages were soon apparent. However, the hospitals had adjusted their routine to the presence of clinical clerks throughout the year and had assigned some hospital duties to them. This delayed the abandonment of the plan for some time after its infeasibility was demonstrated. The experiment ended in 1931 with no mourners at its demise. The senior year returned to its length before 1925-26 with somewhat under 1,800 scheduled hours.

During the experiments with the curriculum of the first, second, and fourth years, that of the third year suffered no experiments and varied in length only about five per cent in nineteen years.

In these years there was some shifting of courses from one semester to another and in one case from one year to an earlier year. Some new courses have been introduced, at least new names were assigned, and some expansion in a few departments of one feature with diminution of some other feature occurred. However, the curriculum of 1941-42 differed little from that of 1924-25, although in the aggregate of scheduled hours in the four years the total had been reduced about eight per cent.

Two great changes came as a response to war conditions. The entrance requirements, standard in this institution since 1909, were suspended in 1942 for the duration of the war in conformity with the request of the American Medical Association, the Association of American Medical Colleges, the army, and the navy. However, the large number of applicants for admission has made it unnecessary to vary greatly in practice, or to admit many men with preliminary education less than the old standard. In July 1943, out of 316 students, only five had less preliminary education than has been required in this medical school for more than thirty years. Of these few, one student was in the second-year class and four were in the first-year class.

The second change is more profound. The "accelerated program" went into operation in June 1942 in response to requests of the army and navy and in conformity with a similar program in most other medical schools of the United States. Under

the accelerated schedule instruction is divided into three "sessions" in each academic year, each of these being equivalent to a former semester. The usual vacations in the summer months, in late December, and in early April have been annulled, as well as the usual examination week at mid-years. Two intermissions occur in each calendar year, one of two weeks in July and another of four weeks in November.

The plan has not been long enough in operation to evaluate its disadvantages, but already medical educators are seriously questioning the feasibility of keeping students in the exacting medical curriculum under instruction continuously with so few and so short intermissions. The accelerated program brought the graduation of the one hundredth class in February 1943, four months prior to the regular time. Another class was graduated in October 1943. Therefore in one hundred years this institution has graduated one hundred and one classes with a total membership of 3,993 men and women. The accelerated plan will bring graduation of two classes in alternate calendar years as long as it is continued.

Attendance of Students

The enrolment in 1923-24, the last session in the old building, was 191 regular students. The larger laboratories of the new building permitted increase of the number admitted to the first class from sixty to seventy-five students.

The laboratories in which first-year subjects are taught have a capacity of eighty students. Some students in the graduate school of arts and sciences were expected to select courses given under the medical faculty and five places were reserved for such students.

Experience of the past ten years had shown that approximately twenty per cent of those who entered the first-year class did not enter the second-year class. The causes of these withdrawals were several: ill health, lack of financial resources, conclusion by a few students that medicine was not to their taste, and chiefly failure in the work of the first year of the medical curriculum, which was heavier and more exacting than the

students had experienced in undergraduate colleges. Therefore the capacity of laboratories for teaching the subjects of the second year was set at sixty, twenty per cent less than the number admitted to the first-year class.

However, increased number of applicants permitted more rigorous selection, with the result that the number of withdrawals because of inability to carry the work of the first year were fewer, and the withdrawals for all causes came to be about fifteen per cent. The capacities of the second-year laboratories were increased to sixty-four. The few students who withdrew at the end of the second year were usually replaced by those admitted to advanced standing from institutions that gave only the first two years of the medical course. Therefore the theoretical capacity of the institution became seventy-five students in the first year and sixty-four students in each of the other years, a total of 267.

The attendance in 1924-25, the first year in the new building, was 209 regular students; this was the first time since 1851-52 that enrolment had exceeded two hundred. Enrolment gradually increased until in 1930-31 an attendance of 255 students equaled the previous largest enrolment in the institution, eighty years earlier in 1849-50.

Encroachment was made upon the five places reserved for graduate students in 1931-32 when seventy-eight were admitted to the first year class. A slight recession in attendance came from 1935 to 1940.

The outbreak of the war brought pressure upon all medical schools to increase their admissions by at least ten per cent, and eighty-seven were admitted in 1941 and in 1942 ninety-two were admitted to the first year class.

The enrolment in 1942-43 rose to 312 students, the first time that more than three hundred had attended (Appendix H). This has brought crowded conditions with classes fifteen to twenty per cent beyond the effective capacity of the institution as it was planned in the early 'twenties.

Since occupancy of the new building in 1924, the smallest first-year class was in 1929-30, sixty-eight students. A larger

class had been accepted, but ten per cent of them were unable to come from causes related to the economic depression of that time. The average size of entering classes from 1924 to 1943 inclusive is seventy-seven students.

Administrative Changes

As in the descriptions in earlier chapters, the administrative changes have been of two types, in personnel and in policies. Dr. Howard T. Karsner, who had been secretary of the faculty since 1916, resigned in 1927 when his duties in his department increased. Dr. Roger G. Perkins was elected to the vacancy and served for two years, when he resigned in view of his plan for early retirement from the faculty. Dr. Victor Caryl Myers, who had recently joined the faculty, became secretary in 1929 and has now served for fourteen years, equal to the longest previous occupancy of the office by Dr. George C. Ashmun from 1893 to 1907.

Dr. Carl A. Hamann, dean since 1912, desired to resign in 1924 when his term of service had equaled that of his predecessor in the office. However, a new president had recently come to the university and the institution was about to move to its new building, two reasons which influenced Dr. Hamann in withholding his resignation. The rise of several new factors in the operation of the medical school further postponed his resignation until September 1928, when he offered his resignation, which was accepted in November after he had been dean for sixteen years and five months, the longest service in the office in the history of the institution, one month more than the total service as dean of Dr. John Delamater. Dr. Torald H. Sollmann was elected dean in November 1928. He was an alumnus of the class of 1896 and Professor of Pharmacology and Materia Medica. He has now served in the office over fifteen years.

Dr. Robert E. Vinson resigned the presidency of the university on December 4, 1933 effective on May 1, 1934, with leave of absence until that date. The same day the trustees appointed Dr. Winfred George Leutner Acting President and in June 1934 made the selection permanent.

Dr. Leutner is a graduate of the college of arts of the university in 1901 and received the degree of Doctor of Philosophy from the Johns Hopkins University in 1905. He also holds several honorary degrees. He is the second president in more than a hundred years chosen from among the alumni. Dr. James D. Williamson, acting president from 1921 to 1923, was a graduate of the college of arts in the class of 1870.

Dr. Leutner was eminently fitted for the appointment. He had been a teacher in a college of arts of the university for twenty years and a professor for ten years. He had been the dean of the college of arts for thirteen years, secretary and treasurer of the Board of Trustees for one year, and director of an affiliated department of the university for one year. During eight years previous to his appointment as Acting President he was Dean of University Administration and in this capacity had directed the policies of instruction in all departments of the university.

The number of members of the voting faculty in 1924-25 was sixteen professors and nine associate professors, a total of twenty-five exclusive of emeritus professors. This increased until in 1943 it became forty-three, of whom nearly half are associate professors. In addition the president and two vice-presidents of the university have seats and votes in the faculty as well as the director of administration of the university hospitals, with a seat without a vote. Five emeritus professors and one emeritus associate professor have seats in the faculty without a vote. Therefore the faculty in 1943 had fifty-three members, forty-six of them with votes. Thus the size of the voting faculty has nearly doubled in nineteen years.

An innovation was proposed in December 1925 which was to reduce the number in the voting faculty from twenty-five professors and associate professors to nine professors, a reversal of the policy adopted a few years before when the associate professors were added to that body. Opposition was immediate not only by those whom it was proposed to exclude but also by several who would have been included in the proposed small select body. Nothing more was heard of this plan after one vigorous meeting of discussion.

The prominent change in administrative policy has been the powers progressively assumed by the executive committee, the inauguration of which has been described in the preceding chapter. Some dissatisfaction with members of the committee elected by the faculty led to a change of policy under which all members are appointed by the president, instead of a majority of the committee being elected by the faculty as under the original plan.

Another change in policy, a reversal of that when the executive committee was first established, came in 1930. From 1915 to 1930 the executive committee had prepared the annual budget. In 1930 the preparation of the budget returned to the plan that existed from 1900 to 1915, this duty being committed to the dean and the president.

A new designation of "director" was given in 1940 to each of the professors in charge of each of the ten departments. The executive committee now consists of the president, the dean, and the directors. Inasmuch as the dean is also a director, there are eleven members of the executive committee. Thus what was vigorously opposed in 1925 has been accomplished by indirect means because the executive committee is essentially a super-faculty.

Changes in the Teaching Staff

The abandonment of the title of associate in 1929 for a teacher in service throughout the year has already been mentioned. This action was followed by use of the same title in a different relation. Since 1929 the title of associate has been used to designate members of other departments of the university and of institutions not affiliated with the School of Medicine—such as the municipal department of health and other associations of health—who give incidental instruction in the medical school. Their services include the giving of some short courses or of occasional lectures in courses conducted by the regular members of the teaching staff. The number of this type of associate has increased from three in 1929-30 to eleven in 1942-43.

The title of teaching fellow, already in use in some other universities, was first used in this medical school in 1921. It has been continuously used in the department of biochemistry since 1927 and in the department of medicine since 1930. Five other laboratory departments have used the title occasionally. The teaching fellows in the laboratory departments have in all cases been students enrolled in the graduate school of arts and sciences who were candidates for the degree of Doctor of Philosophy in preparation for a career of teaching or research. Those in the department of medicine have been recent medical graduates also preparing for teaching or research. All of these are essentially half-time demonstrators receiving small stipends, and the more dignified title of fellow is of potential future value to them in seeking positions. The largest number of teaching fellows in any one year was ten in 1941-42, since which year the number has decreased. However, a considerable number of fellows who did not have the adjective "teaching" prefixed to their titles have done some teaching, less than half-time.

The striking feature in the changes in the teaching staff in the past nineteen years is the great increase in the number of its members until they have come to exceed the total number of students. The following table shows an increase of 129 per cent of active teachers compared to an increase of fifty per cent in the number of students in the same years:

	1924-25	1942-43
Senior Professors	2	0
Emeritus Professors	0	7
Emeritus Associate Professor	0	1
Professors	16	23
Associate Professors	9	19
Assistant Professors	14	59
Associates	13	0
Senior Instructors	5	61
Instructors	33	67
Demonstrators	59	111
Teaching Fellows	2	6
Total Active Teachers	151	346

It is apparent that the participation in teaching is on the average small for each individual, leading to diffuseness in methods of instruction although the students are introduced to various techniques. The majority of the more than three hundred teachers are volunteers and receive no salaries. A considerable number of them are on leave in 1943 because of activity in war service.

Professorial Changes

Many changes in the professorships occurred between 1924 and 1943. Either one or more vacancies arose or one or more appointments were made in every year except 1930-31 and 1940-41. Twenty-one vacancies arose, five by death and sixteen by resignation. Five of the resignations were retirements because of age, three were occasioned by men who left the city, two men resigned to accept professorships in other universities. Six of the resignations came from transfers of professors of military science and tactics to other details.

Twenty-nine professors were appointed. Five of them were appointed to fill vacancies recently arising from death or resignation. Eight were appointed to fill vacancies, some of which had existed for longer than twenty years. Ten professors were appointed with titles never before used in this institution, and six of the appointments were in connection with the professorship of military science and tactics, which is usually restricted by the Surgeon General of the Army to a detail of one officer for not more than four years in one institution.

In this latter group Dr. Thomas Ludlow Ferenbaugh, who had occupied the professorship since 1921, was transferred in 1925 and succeeded by Dr. Samuel Fletcher Parker. When he was transferred in 1930, Dr. Ross Bradley Bretz, an alumnus of the School of Medicine of Western Reserve University, came and spent the usual term of four years. He was succeeded in 1934 by Dr. Humphrey Newton Ervin, who remained only one year because this unit of the Reserve Officers Training Corps was suspended in 1935, as it was in many other medical schools. It was resumed in 1936 with detail of Dr. David Lloyd Stewart

to the teaching. He remained for four years and was succeeded in 1940 by Dr. Harry Hill VanKirk. All of the previous appointees had been majors; Dr. VanKirk was a lieutenant colonel. He remained two years and was then detached to duty in a training camp and was succeeded in 1942 by Dr. Frederick Starr Wright, a colonel.

The prior occupants of the professorship had taught their subject only to such students as elected to take the course, usually less than half of each class. However, when all able-bodied male medical students were put in uniform in 1943, Colonel Wright became commander of the unit with several lieutenants and non-commissioned officers as aides, and every student in uniform came under didactic instruction accompanied by military drill. Colonel Wright is the only professor since the adoption of the graded course in 1888 who has the duty of teaching practically all of the enrolled medical students coincidentally.

Aside from the military men, fifteen professors died or resigned and twenty-three professors were appointed. It will require several pages to make even brief mention of these thirty-eight events and the men connected with them and also to mention a few associate professors who are related to important features of the curriculum. Chronological consideration is used.

Dr. George W. Crile resigned from the professorship of surgery at the end of the session of 1923-24 and Dr. Eliot Carr Cutler was elected to succeed him. Dr. Cutler was a graduate of the Harvard Medical School in 1913. He had taught surgery there for nine years excepting two years of service in the First World War, and at the time of his election he was an instructor in surgery. He had already done some research related to his subject.

All previous professors of surgery had done their teaching in connection with an extensive private practice, and no one of them had received a salary. Dr. Cutler was engaged upon a basis of restricted private practice with a salary. He reorganized the department, bringing in several salaried assistants from other cities. He also organized a program of research by himself

and his assistants which produced good results in the following years. Dr. Cutler was a man of pleasing personality and a good teacher. He soon came to have large influence with the administrative officers.

Dr. William H. Humiston, Clinical Professor of Gynecology, resigned in 1925 when he reached the age of seventy years. He was appointed an emeritus professor. He had taught in the institution for thirty-two years and had been a professor for ten years. The vacancy in the professorship was not immediately filled.

Since 1890 there had been no professor of the diseases of the nose, ear, and throat. The teaching had been under charge of a man of rank lower than professor. In May 1925 Dr. John Marvin Ingersoll was promoted and appointed Clinical Professor of Otolaryngology, a belated recognition of many years of excellent service to the institution. Dr. Ingersoll was a graduate of the college of arts of the university and of the medical department in 1893. He joined the teaching staff in 1895 and had charge of the teaching of these subjects after 1903. He became an associate professor in 1910. His occupancy of the professorship was short. In November 1925 he decided to retire from practice and move to a southern state; so he resigned after thirty years of teaching. He was appointed an emeritus professor.

Similarly there had been no professor of obstetrics since the retirement of Dr. Powell in 1911. In 1925 Dr. Arthur Holbrook Bill was appointed Professor of Obstetrics. He was a graduate of the college of arts of the university and of the medical department in 1901. He had been a member of the teaching staff for twenty years and an associate professor with vote in the faculty for sixteen years. He had directed the department of obstetrics since 1911. Dr. Bill had extensive training in obstetrics with study in hospitals in other American cities and in Europe, and he had long experience as an excellent teacher. In 1927 the subjects of obstetrics and gynecology were combined and the professorial title of Dr. Bill was extended to include both subjects. In over thirty years in charge of obstetrics Dr. Bill has

much extended the facilities for teaching and improved the quality of the instruction.

An innovation came in 1926 when the Director of Administration of Lakeside Hospital was given the title of Professor of Hospital Administration. Dr. Karl Halifax Van Norman was appointed to this position. He was a graduate in medicine of the University of Toronto in 1904 but had held no teaching position in any medical school. No course of instruction was organized. The participation in instruction of Dr. Van Norman consisted of a few lectures given to members of the third and fourth year classes. When he resigned in 1930 and left the city the professorship was not continued. However, his successor in the directorship of the hospital, Dr. Robert Hamilton Bishop, an alumnus of the medical school, has an *ex officio* seat in the medical faculty, without a vote.

Dr. James Lucien Morris, who had been in charge of the department of biochemistry since 1918, and had been an associate professor since 1923, died in 1926. A search for a successor did not yield immediate results and the work of the department was carried by men of lower rank during 1926-27. Dr. Victor Caryl Myers was appointed Professor of Biochemistry in 1927. This was the first appointment of a professor of biochemistry. The word "chemistry" had been in no professorial title in the medical faculty since 1903. Dr. Myers was a graduate in arts of Wesleyan University and holds the degree of Doctor of Philosophy from Yale University. He had eighteen years of teaching experience, two years in the Albany Medical College, thirteen years in the New York Post Graduate Medical School, and three years in the University of Iowa. He had been head of a department of biochemistry for two years in New York City and for three years in Iowa. Thus he had adequate experience in teaching and in departmental administration.

Dr. Myers had already published considerable research and his attention to research has continued. Since he came the department of biochemistry has had more students of the graduate school of arts and sciences who were candidates for the de-

gree of Doctor of Philosophy than any other department of the medical school. Dr. Myers and his assistants have trained a large number of men in biochemistry who have entered teaching and research positions in the subject. He has also given service in administration of the school as secretary of the faculty for fourteen years.

Dr. Charles F. Hoover, Professor of Medicine, died in June 1927 of illness from an infection which long defied diagnosis. His early training has been mentioned in a previous chapter. His teaching service in this institution covered thirty-three years. He had been a professor for thirty-one years and Professor of Medicine and head of the department for eighteen years.

His service has five phases: practice, participation in organized medicine, teaching, personal research, and training of medical graduates for practice, teaching, and research. He was a leading practitioner and consultant of northern Ohio, with emphasis upon diagnosis. He entered into organized medicine and was much sought as a speaker at medical meetings, both locally and in many parts of the country. His reputation in both practice and medical research was nation-wide. Locally he was one of the leaders in the development of the Cleveland Medical Library, which he considered a basis of development of interest in research in the profession.

As a teacher he enjoyed much success. He elaborated the courses which he taught, and although he demanded exhaustive and accurate work of his students, he gained their respect and admiration. His personal research was of high order under adverse conditions. When Lakeside Hospital was built research in clinical subjects was in its infancy and no provision was made for research. The report of the dean in 1916 states: "A laboratory for research in medicine has been organized in Lakeside Hospital, in which valuable work has already been done. The establishment of this laboratory marks an important step in the progress of the medical school and hospital."[5] This laboratory was located in a small basement room and equipped largely at the personal expense of Dr. Hoover. Here he worked constantly, except for the time he was in the army, until his death.

Dr. Hoover was not a voluminous writer, but his writing was of high order in clear language and not done until extensive evidence supported his conclusions. Hence what he published has stood the test of time, and some of it was of a pioneer nature.

Dr. Hoover trained a considerable number of assistants who have taken a high place in practice, teaching, and research; several of them have become professors of medicine in different institutions. He was a diligent scholar and a man of fine personality. His many excellent qualities made him a high type of medical school professor. His death was a great loss to the medical school and a sorrow to many friends among patients, students, alumni, and colleagues.

Dr. Frank Emory Bunts, Professor of Surgery and Clinical Surgery since 1894, resigned in 1928 and was appointed an emeritus professor. He was always an excellent teacher and had a personality that gained many warm friends. With some colleagues, he had organized the Cleveland Clinic in 1921, which had developed to a point where Dr. Bunts wished to give all his attention to it, and therefore he resigned from teaching. However, his plans were annulled by his death five months after his resignation.

The vacancy in the professorship of medicine presented the problem of finding a successor comparable to Dr. Hoover in teaching and research. Dr. Hoover had combined an extensive private practice with his teaching and research, and had received only a small stipend from the budget. Decision was reached to engage a man who would give practically all his time and effort to the duties of the professorship and would be permitted to practice to a limited extent only as was then the condition in the professorship of surgery. Then came debate as to whether to choose one of the young men trained by Dr. Hoover or to bring someone from outside the city; the latter plan prevailed, with delay of more than a year in appointing a successor; the teaching meanwhile was carried by two associate professors.

Dr. Joseph Treolar Wearn was elected Professor of Medicine in 1929. He was a graduate of the Harvard Medical School in

1917. He had eight years of teaching experience, two years as instructor of pharmacology at the University of Pennsylvania, followed by six years in teaching medicine at the Harvard Medical School. During two of these six years he also taught physiology in an affiliated department of Harvard University. When elected, he had been Associate Professor of Medicine at Harvard Medical School for one year.

At the same time two men trained by Dr. Hoover were promoted to clinical professorships of medicine. Dr. Marion Arthur Blankenhorn was a graduate of the School of Medicine of Western Reserve University in 1914. He had been a member of the teaching staff of the department of medicine for thirteen years and had been an associate professor for three years. He had an extensive training, was an excellent teacher, and had published considerable good research. He resigned in 1935 to accept the professorship of medicine and head of the department in the Medical Department of the University of Cincinnati, where he continues in a successful career.

Dr. Roy Wesley Scott, an alumnus of the medical school of the class of 1913, had taught in the department of medicine for one year and then in the department of physiology for two years, after which he returned to the department of medicine where he had been teaching continuously for twelve years when he was promoted to a professorship. He had been an associate professor for three years. Dr. Scott has done much research since his graduation and has attained a wide reputation in certain fields of diagnosis and practice. He is a favorite teacher with the students and has been a main reliance in the department for many years with development of outstanding excellence in teaching.

Two professors who had first come to the medical faculty in the early 'nineties died in 1930, Dr. Carl A. Hamann, Professor of Clinical Surgery and Applied Anatomy, in January, and Dr. George N. Stewart, Professor of Experimental Medicine, in May. Comment upon Dr. Stewart has been made in chapter XV and further comment upon Dr. Hamann is postponed to chapter XVIII. As already stated, the vacancy arising from the

death of Dr. Stewart was not filled. Some of the teaching duties of Dr. Hamann were replaced by appointment of a clinical professor of surgery.

Dr. Carl Henri Lenhart was a graduate of the college of arts of Western Reserve University in 1901 and of its medical school in 1904. His connection with the teaching staff had been intermittent. He was a member of the department of physiology from 1910 to 1913, and in the department of surgery from 1917 to 1924. Thus he had ten years of teaching experience and had done considerable research. He was chief of the surgical staff of St. Luke's Hospital—not affiliated with the medical school—when he was appointed chief of the surgical staff at City Hospital and Clinical Professor of Surgery in 1930 to fill two vacancies caused by the death of Dr. Hamann.

Dr. Roger G. Perkins, Professor of Hygiene and Preventive Medicine for twenty years, early in 1930 announced his intention to resign at the end of the session of 1929-30. During his service as head of the department of hygiene and bacteriology he had much increased its relations to public health and the desire was to continue and to increase this relation. Therefore a man trained in public health was sought as a successor.

Dr. James Angus Doull was appointed Professor of Hygiene and Public Health in 1930. This was a change in the terminology of the professorship; the name of the department was also changed at this time to hygiene and public health. Dr. Doull, a Nova Scotian by birth, had been graduated in arts at Dalhousie University and in medicine there in 1914. After service overseas in the first World War, he studied public health at the University of Cambridge, where he received the degree of Doctor of Public Health in 1919, followed in 1921 by the same degree of the Johns Hopkins University. He had taught for nine years at the Johns Hopkins University where he was an associate professor when invited to come to Western Reserve University. During one semester he had taught at the University of Rio de Janeiro. Dr. Doull had an extensive training and wide experience and has continued and enlarged the excellent work begun by Dr. Perkins, fostering wider relations

in matters of public health in Cleveland. He has done much research and writing, including a study of leprosy in the Philippine Islands. He has served for a few months as a temporary officer of the United States Public Health Service, with overseas duty in the Second World War.

Dr. John P. Sawyer, Professor of Therapeutics and Clinical Medicine, resigned in 1932 after a membership of forty-four years on the teaching staff, the longest service of any professor who has terminated his active service in the first century of the existence of the medical school. He was appointed an emeritus professor. References to his varied service to the institution have been made in earlier chapters. He was a pioneer in introduction in this medical school of several features that are now familiar. The total of his contributions to the school make him one of a small group to whom primarily the success of a hundred years is due.

Also in 1932 Dr. Cutler resigned from the professorship of surgery. He returned to the Harvard Medical School, whence he had come eight years earlier, to become Professor of Surgery.

Dr. Carl H. Lenhart in two years as Clinical Professor of Surgery and as chief of the surgical staff at City Hospital had been successful both in teaching and administration. He was appointed Professor of Surgery and head of the department in 1932.

There had been no separate professor of gynecology and no professor of otolaryngology since the resignation of two professors in 1925. Dr. William Hawksley Weir was appointed Clinical Professor of Gynecology in 1933. He was a graduate in medicine of the University of Toronto in 1896; he had been teaching gynecology in the School of Medicine of Western Reserve University for more than thirty years, and he had been an associate professor for six years.

When Dr. Ingersoll resigned from the clinical professorship of otolaryngology in 1925, the subject was put in charge of Dr. William Bricker Chamberlin, who was promoted to an associate professorship in 1927. He was appointed Clinical Professor of Otolaryngology in 1933. He was an alumnus of the

medical school of the class of 1900; he had begun teaching diseases of the nose, ear, and throat in 1902 and had become an excellent teacher.

Dr. Harry Goldblatt was appointed Experimental Professor of Pathology in 1935. He was a graduate in medicine of McGill University in 1916 and had begun teaching pathology in the School of Medicine of Western Reserve University in 1919. The years from 1921 to 1924 were spent in study in Europe. He had been an associate professor for eight years when promoted to a professorship. Dr. Goldblatt has continued to do a large amount of teaching.

The professor of dermatology and syphilology had resigned in 1914 when the teaching of the subject was put in charge of a younger teacher, Dr. Harold Newton Cole, an alumnus of the class of 1909. Dr. Cole became an associate professor in 1921. In 1936 he was appointed Clinical Professor of Dermatology and Syphilology, after an excellent record of teaching, the publication of research, and attainment of a high position among the practitioners of this specialty in the United States.

Dr. William E. Bruner, Professor of Ophthalmology, retired in 1936 and was made an emeritus professor after forty-two years of membership on the teaching staff. Comment on his many services has been made in an earlier chapter. The vacancy in the professorship has not been filled. The direction of the teaching was committed to Dr. Abram Breneman Bruner, a graduate in medicine of Columbia University in 1916, who had been on the teaching staff for fifteen years and had been an associate professor for six years. Dr. Abram Bruner has continued to conduct successfully the teaching of the subject in which his uncle was engaged for so many years.

Dr. Thomas W. Todd, Professor of Anatomy, died in December 1938. The teaching was put in charge of an assistant for the remainder of the session of 1938-39, while search was made for a successor.

Dr. Norman Louis Hoerr was chosen from among several men considered, and appointed Professor of Anatomy in 1939. He holds the degree of Doctor of Philosophy of the University

of Chicago conferred in 1929 and also the medical degree of that university attained in 1931. He had been teaching in the department of anatomy of that university for fourteen years and had gained a reputation for excellent teaching, along with research in the lines of histology. He has greatly improved the teaching of gross anatomy.

The experience of the past ten years brought conviction that the professor of anatomy should not be permitted to accept also the directorship of the Brush Foundation. Dr. William Walter Greulich was appointed to that directorship and inasmuch as he wished to continue some teaching in anatomy he was also appointed Professor of Physical Anthropology and Anatomy in 1940. Dr. Greulich holds the degree of Doctor of Philosophy of Leland Stanford University conferred in 1934. He had ten years of experience in teaching biology, anthropology, and anatomy, seven years in the latter subject. He had been a member of the teaching staff of Yale University for four years before coming to Cleveland. There is no teaching of anthropology to medical students, but courses in this subject are offered in the graduate school of arts and sciences. Dr. Greulich gives most of his attention to his directorship, with some participation in teaching anatomy, and research in embryology.

Dr. Joseph Marchant Hayman was appointed Professor of Clinical Medicine and Therapeutics in 1940, a professorship which had been vacant since the resignation of Dr. Sawyer in 1932. Dr. Hayman was graduated in medicine at the University of Pennsylvania in 1921, and was an instructor in pharmacology there for three years. He came to the School of Medicine of Western Reserve University in 1925 and in 1929 was appointed Associate Professor of Medicine, and after a total of sixteen years of teaching experience became a professor in 1939.

Dr. Charles W. Stone, Associate Professor of Nervous Diseases, died in 1939 after a long illness. During this illness the teaching of the subject had been largely done by Dr. Louis Joseph Karnosh who was given charge of the subject after the death of Dr. Stone. Dr. Karnosh was graduated by the School of Medicine of Western Reserve University in 1920. While he

Airplane View of Medical Center

was a medical student he did some teaching of biology in the dental department of the university and continued teaching bacteriology and pathology in that department after graduation in medicine. He began to teach nervous diseases in 1921 and became an associate professor in this subject in 1937. With twenty years' experience as a teacher of outstanding excellence in several subjects he was well fitted to take charge of the teaching of this subject which he has extended, along with research and considerable published writing.

Dr. William B. Chamberlin, Clinical Professor of Otolaryngology, died in September 1939. The direction of the teaching was taken over by Dr. Carlos Eugene Pitkin, who was promoted to Clinical Professor of Otolaryngology in 1940. He was graduated from the School of Medicine of Western Reserve University in 1902; he had been a member of the teaching staff since 1908 and had taught diseases of the nose, ear, and throat for thirty years.

Dr. Claude Schaefer Beck was appointed Professor of Neurosurgery in 1940, a new title for a professorship in this institution. He had been graduated in medicine at the Johns Hopkins University in 1921 and came to the School of Medicine of Western Reserve University as a research fellow in 1924, and a year later was appointed to a teaching position. Excellent service in teaching brought promotion to an associate professorship in 1933. Dr. Beck has done much research since he came to Cleveland, some of it of great value in the practice of medicine and surgery.

Dr. John Augustus Toomey was appointed Clinical Professor of Pediatrics and Contagious Diseases in 1940. He was a graduate in arts and in law before he received the degree of Doctor of Medicine from the School of Medicine of Western Reserve University in 1919. His first teaching was in anatomy, then in medicine, and in pediatrics beginning in 1922. He gave especial attention to contagious diseases and became an associate professor in 1933. He has done much research and writing and has become an authority on contagious diseases with a nation-wide reputation.

Dr. Frederick C. Waite, who had been a member of the teaching staff for thirty-nine years, and Professor of Histology and Embryology for thirty-four years was retired in 1940 and appointed an emeritus professor.

Dr. Enrique Eduardo Ecker, a Hollander by birth, was appointed Professor of Immunology in 1942. He holds the degree of Doctor of Philosophy from the University of Chicago conferred in 1917 and had joined the teaching staff of the School of Medicine of Western Reserve University in 1918. His teaching titles since 1919 have been in immunology, of which subject he became an associate professor in 1927.

Dr. Edward Muntwyler was appointed Professor of Experimental Biochemistry in 1943. He holds the degree of Doctor of Philosophy from the University of Iowa granted in 1928. He has been a member of the teaching staff of biochemistry in this medical school since 1927, and became an associate professor in 1935. He continues to do much teaching and has a large part in directing graduate students in their research.

Dr. John Paul Quigley was appointed Professor of Gastro-Intestinal Physiology in 1943. He holds the degree of Doctor of Philosophy from the University of Chicago received in 1929, when he joined the staff in physiology in this medical school. He became Associate Professor of Physiology in 1935, and had sixteen years of teaching experience when he was promoted to a professorship. His title indicates the line of his research.

The twenty-three active professors at the close of the century of existence of the institution are evenly balanced, with eleven in pre-clinical subjects, eleven in clinical subjects, and one in military science. Only four of them were professors in 1924, the opening year of the period of which this chapter treats. The average age of these twenty-three men in 1943 was fifty-six years, with ten of them sixty or more years of age. Inasmuch as the rules of the university bring retirement from active teaching at seventy years of age it is evident that the changes in professorships in the next nineteen years will be as great as in the past nineteen years.

One cannot say that professorships have been "established"

in this institution except for two endowed and named professorships, the Henry Willson Payne Professorship of Anatomy and the Oliver H. Payne Professorship of Surgery. In a hundred years many variations of professorial titles have been used with frequent change of terminology of teachers of familiar subjects and occasional introduction in later years of new subjects. The use of the adjective "clinical" has also varied. At times it has been placed before the word "professor" in the title, and again before the word indicating the subject being taught. In general the word "clinical" in a teaching title indicates that the holder of the title is a volunteer part-time teacher and receives no salary, but this condition is occasionally violated. The absence of the adjective in professorial titles indicates for teachers of clinical subjects, that the individual is the administrative head of the department or division of a department designated by his title, but this use is not universal in this school. In this institution avoidance of identical titles for professorships has been accomplished by inserting an adjective. In many universities there are multiple occupants of professorships with identical titles.

Development of Research

Each of the six periods into which I have divided the narrative of the progress of the institution had a few prominent features. The rhythm of the story shows in each period a few dominant notes and occasionally a discord. The three periods of the second half-century show continuously the theme of research. It was a low note from 1893 to 1910, overpowered by attention to development of the curriculum and inhibited by the near penury arising from small attendance of students. Research reached a relatively more important status from 1910 to 1924 but was still in the middle of the scale. Research has risen to a high pitch in the years from 1924 to 1943. Several things contributed to this more dominant position.

The first was occupancy of the new building where each department had adequate room for research compared to some dark corner or closet-sized room in the old building. Moreover,

facilities and equipment for carrying on research were vastly extended.

Next came the adoption of the policy of appointing full-time professors in the clinical departments, at first one in 1924 and another five years later. Each of these was expected to develop a research program, thus extending to the clinical departments the attention to research that prior to 1924 had been largely restricted to the laboratory departments. Then in the few years of abundance came employment of many more full-time young men, to each of whom it was clearly indicated that he was expected to engage in research.

Another influence was a closer relation to the graduate school of arts and sciences. A phantom relation had existed during the period of the experiment on the fifth year in medicine, without any participation of the members of the medical faculty beyond an occasional letter to the dean of the graduate school concerning some candidate for a degree. When the medical school moved to the university campus several of the medical professors were added to the faculty of the graduate school. The number of graduate students who were candidates for higher degrees and were working in the medical school laboratories was much increased. Each of these was doing research in the preparation of a dissertation required for his degree.

The number of fellows increased. A few fellowships were endowed, leading to named fellows. Others were given the title with a stipend from the budget. The excellent facilities brought fellows assigned to work by some of the foundations that supported research. All of these as well as the teaching fellows were doing research.

The belief of some members of the faculty that medical students should do research led to an experiment. A former professor who was interested in research gave a fund each year which was applied to what were called "summer scholarships." A liberal stipend was offered for two months and applications invited from the better students for these scholarships to do research. These students were distributed among the departments, fifteen or more students each summer for five years. Most

departments made a vigorous effort to teach these students the methods of research with the hope that some might be attracted to research in later years. An amateur could not produce anything worth publication in two months although a few continued the work in later summers and did publish a few short papers. It became apparent that most of the applicants were more interested in the generous stipend of the scholarships than in research. Also the supervision of these students took much time of members of the staff and therefore diminished their personal research. The plan was abandoned but was one evidence of the increased attention to research. The Brush Foundation, at first only affiliated but later a department of the university, conducted much research.

Experience showed that funds to support research could be obtained from outside sources. Several gifts were received for this purpose, and also several continuing annual contributions from foundations, two of them local and several with headquarters elsewhere. The result of all this was that research became a dominant note in the School of Medicine of Western Reserve University in the 'twenties.

Evaluation of research is a difficult problem. It has two elements, quality and quantity. The quality is a matter of opinion and the individual who knows most about a particular effort in research—the one who is doing it—is likely to have a prejudiced opinion. Quantity is somewhat less difficult to evaluate because there is evidence in the amount of publication. This also is a remote criterion of quality because if a paper is accepted for publication it has some value in the opinion of the editors of the journal that publishes it. When one simply counts the number of publications of an individual, or even the number of printed pages of his publications, a false conclusion may be reached, because frequently one publication has more value than the aggregate of many. However, the number of publications is an index, even if not critical, of increase in research activity and therefore the following statistics are given to show the growth of research in the School of Medicine of Western Reserve University since 1900.

An incomplete list of publications by members of the teaching staff, already mentioned in an earlier chapter, showed publication of somewhat fewer than 150 contributions in the years from 1900 to 1910. This was an average of fifteen each year. The number in the final year of the decade was greater than the average.

Members of the teaching staff from 1921 to 1923 inclusive published 225 books and articles, an average of seventy-five each year.[6] In 1923-24 the number was seventy-seven.[7] The first year of occupancy of the new building brought an increase in 1924-25 to 137 publications.[8] These included all types of publications such as book reviews, printed addresses, and other things not the direct result of research.

The number of publications by members of the teaching staff based on research in 1924-25 was sixty articles by fifty men and in 1925-26 eighty articles by sixty-six men. Three years later in 1928-29 this had risen to 147 articles by 165 men, some of them joint authors.[9] In addition research fellows published eleven articles in 1924-25, sixteen in 1925-26, and eight in 1928-29.[10] These take no account of dissertations prepared by candidates for advanced degrees, few of which were published, but all of which represented individual research. There were scarcely any graduate students in 1924-25, but by 1928-29 there were nearly forty working in the medical school. Therefore the number of men engaged in research to some extent in the institution had increased from fifty in 1924-25 to over two hundred in 1928-29.

The financial difficulties that began in 1930 soon caused a lessening in the number of men on the staff, and those who were left each had a heavier teaching load and therefore less time for research. In the next five years the number of publications decreased, and then began to recover. The number of publications by members of the staff in 1941 was 188.[11] The war conditions, which brought absence of many members of the staff, diminished research and in 1942 the number of publications was 125.[12]

These statistics show that attention to research has been

much greater since removal to the new building in 1924 and that even under adverse conditions during the period of the financial depression and the second World War, research continues to maintain a position in this institution much superior to what it was in 1923-24.

Financial Matters

The financial history of the medical school from 1924 to 1943 included three periods: six years of large expenditures because of expansion of activities, three years of uncertainty, and ten years, beginning in 1933, first of severe retrenchment and then of steps toward recovery. These events are so interwoven with events throughout the university that space does not permit analysis here. Therefore only a few comparative figures are given. However, a large part of the liabilities incurred in these years arose in connection with the relations of the medical school to the University Hospitals, and the remainder in preparation for a program of general expansion for the university as a whole, to be financed by an ambitious campaign, which the prolonged economic depression made impossible.

The annual expenditures of the medical school of about $250,000 in 1923-24 were increased with removal to the new building, and in 1925-26 were over $371,000.[13] Endowments did not increase, but annual expenditures mounted to over $700,000 in 1929-30, with an accumulated deficit of nearly $600,000.[14] The expenditures were reduced to $351,000 in 1934-35.[15] Current deficits were eliminated in 1942. The current budget has been restored for 1943-44 to approximately $555,000 operating under the accelerated program.

The accumulation of deficits was based upon anticipation of gifts, some of them promised and others only hoped for, all largely unrealized because of the national economic depression that began in 1929.

The policy of retrenchment that was begun in the early 'thirties involved reduction in salaries and advice to younger salaried teachers who could be spared to seek positions elsewhere. This led to a diminution in the size of the teaching staff.

A considerable number of gifts to the medical school were received between 1924 and 1943. Mr. Samuel Mather gave $1,200,000 in 1927 and a promissory note for $1,800,000 for the operating expense of the university and reduction of debt. In this fund the School of Medicine shared generously.

The General Education Board gave $750,000 in 1928 to build the Institute of Pathology. A bequest of $100,000 for endowment was received in 1931 and a gift of $300,000 for endowment of the Oliver H. Payne chair of surgery was received in 1933. Smaller sums were received with which funds were established to provide fellowships, scholarships, and prizes and to support research. One of these was a fund of $16,000 received from the alumni and other friends in 1938 to endow a fellowship in memory of Professor Charles F. Hoover, who died in 1927. In 1943 an initial endowment of $50,000 was given for fellowships in surgery to bear the names of Dr. George W. Crile, Dr. Frank E. Bunts, and Dr. William E. Lower, all former teachers in that department.

The major annual income from operating expenses during the past ten years, besides income from endowment, has come from annual gifts from trustees, foundations, and individuals and was given mainly to support research.

The annual tuition charge in 1924-25 was $250. This was advanced to $300 in 1925-26, to $350 in 1928-29, to $400 in 1931-32, and to $500 in 1940-41. The increase in the tuition charge and the increase in attendance has resulted in an increase in income from tuition from about $54,000 in 1924-25 to about $232,000 in 1942-43. These figures are not directly comparable because the operation of the accelerated program in 1942-43 brought payment for what was equivalent to tuition for one and a half years. The comparable figure in the later year is about $155,000.

Summary

The final nineteen years of the first century brought many changes in the School of Medicine of Western Reserve University. The appointment of one full-time clinical professor who

began service in September 1924, was in response to a debate that had continued for twenty-five years and still continues among medical educators as to the relative worth of private practice and of research in making a good clinical teacher. The provisional plan in 1924 was to appoint several full-time professors not only in major clinical subjects, but also in several of the specialties. Only one additional full-time professor in a clinical subject was appointed. However, the continuance of the provisional plan may explain the long delay in promoting several deserving part-time associate professors in clinical subjects to full professorial rank. The policy was suspended indefinitely in 1933. Then in the next few years several associate professors were advanced to professorships.

The few changes in the curriculum reflected the stabilization of medical education that had been accomplished in the United States since 1900. Some experiments with the curriculum which were later abandoned had no lasting or serious effect. Other mistakes were of graver import and can be remedied only by the lapse of time.

If we should try to balance errors over against the credit for accomplishment in all matters connected with the medical school in these nineteen years, the credit side would show a favorable balance in the activities of the institution because the medical school has definitely improved both in reputation and service since 1924.

The improvement in facilities for teaching the clinical subjects, and for research in these subjects, has been marked, and has been made possible by the new University Hospitals and by other hospitals with which the medical school has intimate contractural relations, namely the municipal City Hospital, the tuberculosis hospital connected with it, and Charity Hospital. The present facilities in the laboratory branches were in hand at the opening of the period of which this chapter treats, although not yet used, except for the new pathological laboratory which was provided later.

The average training of the teachers now in service is better because in 1943 far more men who have enjoyed the advance

in medical education are available than in 1924. The course of instruction has improved because some features which had not become stabilized in 1924 have now been thoroughly assimilated. However, the curriculum is not static although no startling changes now appear likely.

Probably the greatest single improvement in this institution in nineteen years has been the accomplishment in research and especially in those phases immediately applicable to professional practice. A danger lies in any attempt to force men to do research who have neither taste nor aptitude for it, and in failure to appreciate that some of the best teachers in the history of the institution have done no research and that others of this type may appear.

The financial difficulties, painful as were their results during a few years, have on the whole had a beneficial influence on the morale of the institution.

A few minor improvements merit mention. The close geographical relation and cooperation with the Cleveland Medical Library is of distinct advantage to both teachers and students. The establishment of the *Clinical Bulletin* by the medical school and hospital in 1937 was a forward step and gives the best contact with the alumni that the medical school has ever had. Only once before has the institution published a periodical, when for a few years in the late 'nineties faculty and students cooperated in such an enterprise.

The collection of busts, portraits, and tablets as memorials to former professors was begun in 1847 with acquisition of a bust of Dr. Noah Worcester, then lately deceased. In the next three years excellent portraits of all six professors were acquired. This collection has been considerably increased since 1924, until it now includes nearly forty items. The collection has educational value as well as being a memorial to many who have labored faithfully through many years to build up what is now a leading educational institution of the country.

Although the routine work and progress of the institution have been disturbed by the present necessities of war, normal conditions will return, and will give opportunity to those

responsible in the early years of its second century to continue the good work and to learn from the mistakes to which reference has been made in this the last narrative chapter of a hundred years of the School of Medicine of Western Reserve University.

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BOOK V: EPILOGUE

XVIII

TEN DEANS AND A VICE-DEAN

THIS CHAPTER is given to biographical sketches of the deans, five in each half-century. Their occupancy of the office varied from less than two years for two of them to over sixteen years for two others. Each of the illustrations of a dean or vice-dean is reproduced from a photograph taken while he was serving in the office.

During the first half-century the deans were elected by the faculty; during the second half-century they have been appointed by the trustees of the university. The elections by the faculty were annual. However, record of election is lacking in some years, the incumbent continuing by common consent.

The two deans who served from 1843 to 1873 were also founders of the institution, and biographical sketches of them have been included in chapter VI, on the founders, leaving here to mention only their administrative services.

In most of these sketches the reasons for selection are given and also the reasons for retirement from the office. Inasmuch as each of these men was a professor and because something of the career of each man appointed to a professorship has been given in the narrative chapters, repetition of some facts will appear in this biographical chapter.

JOHN DELAMATER, DEAN 1844-61

Although Dr. Delamater was not the first dean, he is here first considered because the man who preceded him during a single session in the office later had a second and longer term as dean. Dr. Delamater was elected dean on March 20, 1844. His selection was not because of previous administrative experience but rather because his wide reputation as a practitioner and excellent teacher was expected to attract students to the medical college; also he was the member of the faculty of greatest age. His predecessor was only thirty-five years of age.

The administrative duties of Dr. Delamater were not ex-

tensive. Other members of the faculty held the offices of secretary and treasurer, which had most contact with students. Although he was skilled in practice and in teaching, he was not of the administrative type and was an unwilling dean. At the election of late February 1846 he declined to accept the office longer, and Dr. Jared P. Kirtland, the next oldest member of the faculty, was elected as dean.

However, before the next session of the medical college began, Dr. Delamater was persuaded by his colleagues again to accept the office, and at the next faculty meeting after that of February, which came early in October, Dr. Kirtland resigned and Dr. Delamater was elected as dean. Because the occupancy of the office by Dr. Kirtland was only during the vacation and he never presided at a faculty meeting in his capacity as dean, I have not counted his term in this chapter.

Again in 1854 Dr. Delamater urged that he be relieved of the deanship. A committee of his colleagues waited upon him and persuaded him to continue. In later years he indicated his unwillingness to continue as dean, and finally in February 1861, when he was seventy-four years of age, he was permitted to resign because of feeble health. His service in the office extended from March 1844 to February 1861, a span of seventeen years less one month. However, during over seven months in 1846 he was not dean, so his total occupancy of the office was sixteen years and four months.

There is little record that gives a clue as to his efficiency as dean. On several occasions when a representative of the faculty was to be sent to some meeting, another member of the faculty accepted the errand. In the plans of the new medical building and its erection in 1845 the name of Dr. Delamater does not appear. Other men constituted the various committees. Dr. Cassels was secretary of the faculty during seven years and treasurer during nine years of the term of Dr. Delamater as dean, and was his chief administrative assistant.

Such evidence as the records afford, and some collateral evidence, show that Dr. Delamater was constantly an unwilling dean and kept in office only by the urging of his colleagues.

His great modesty would not have made the office attractive to him because of publicity arising from its occupancy.

John Lang Cassels, Dean 1843-44 and 1861-73

Dr. Cassels was one of the founders, and his biography has been given in chapter VI. He had been the successful dean of the Willoughby Medical College for seven years immediately preceding the founding of the Medical Department of Western Reserve College. This made him the logical choice as the first dean. The successful operation of the medical college in its first session is evidence of his efficiency as dean. He was displaced at the end of the first session only to make way for a man who was older and more widely known.

The resignation of Dr. John Delamater in 1861 left Dr. Cassels the best man in the faculty as a successor. He had at that time been an officer in a medical faculty for twenty-five years; he had served as a dean of a medical college for eight years, and had been the chief assistant of the retiring dean for sixteen years.

His second term in the deanship continued for twelve years, until he was forced to resign by a serious illness which incapacitated him for any duty for nearly two years. His total service in offices of two medical faculties was thirty-six years, covering the period from 1836 to 1873 continuously except for the year 1844-45. In addition to the seven years as dean at Willoughby, he was dean in the medical college in Cleveland for a total of thirteen years in two widely separated terms, making a total of twenty years' service as a dean. In the interval he was secretary of the faculty for seven years and treasurer for nine years. He served nine years longer in an administrative position in a medical college than did any other man ever connected with the institution.

He was treasurer of the faculty when elected as dean in 1861 and probably held this additional faculty office throughout his deanship. Definite record of this is available for the last half of this period; record is lacking for the first half.

The records from 1861 to 1867 are scanty and give little clue

as to his efficiency. However, the fact that he was kept by his colleagues in some faculty office during so many years warrants the inference of a high degree of efficiency. The years of the second term as dean were years of great difficulty for the institution under conditions arising from the Civil War. The fact that he brought the institution through this crucial period and that in the last six years of his deanship the medical college made rapid recovery is additional testimony that he was a successful administrator.

Reference has already been made to the probability that he contributed considerably from his private purse to bring the institution through its difficulties. His chief administrative assistant was Dr. Proctor Thayer, who was secretary of the faculty during the greater part of the time that Dr. Cassels held the deanship.

John Bennitt, Dean 1873-81

Dr. Bennitt was born at Pultney, Steuben County, New York, March 24, 1830. His family moved to Indiana when he was a child of seven years. His early education was in country schools of that state. He attended the classical institute at Angola and was graduated at the La Grange Collegiate Institute at Ontario, Indiana, in 1845. He then taught school for two years.

He began the study of medicine under a preceptor at the age of seventeen, and entered the Medical Department of Western Reserve College in 1848.[1] Between his first and second sessions in the medical college, he studied with a different preceptor at Centreville, Michigan. He was graduated in medicine at Cleveland March 6, 1850, three weeks prior to his twentieth birthday.

Being too young to practice independently, he returned to Centreville, Michigan, as assistant to his preceptor, and afterward as his partner until the preceptor died. While there he founded a county medical society and was its president. He attended the session of 1855-56 of a medical college in New York City, not certainly identified, but did not receive an additional medical degree.

He entered the army in 1862, first as assistant surgeon and then as surgeon of a Michigan regiment. He was taken prisoner and then exchanged and continued in the army until 1865. He then returned to his home in Michigan where he practiced for a year.[2]

He was appointed to the professorship of physiology and histology in the Medical Department of Western Reserve College in 1866 and moved to Cleveland. He became Professor of Principles and Practice of Medicine in 1867 and continued to teach the subject of medicine for twenty-five years.

The resignation of Dr. Cassels from the deanship in January 1873, brought immediate renewal of the effort to consolidate the two regular medical schools, which had been last attempted in 1871. The election of a dean was deferred during the negotiations, which continued for four months. The faculty of the Medical Department of the University of Wooster withdrew their proposal of union in May 1873, and Dr. Bennitt was elected as dean.[3]

He was not the logical man for the office. He had held no administrative office in the faculty, and had been a member for only seven years. Dr. Proctor Thayer had been on the teaching staff for twenty years, had been secretary of the faculty during twelve years, and was the chief administrative assistant of the dean lately retired. He was more widely known than Dr. Bennitt.

The reason for the election of Dr. Bennitt instead of Dr. Thayer was related to the continuing efforts to consolidate the two regular medical colleges. The expectation was that these would soon be renewed. Dr. Gustav Weber was the leader in the rival medical college. He and Dr. Thayer were the two leading surgeons in northern Ohio, and in their rivalry in practice they were not on friendly terms with each other. Dr. Thayer was not as favorable a person for prospective negotiations with Dr. Weber as Dr. Bennitt, who did not practice surgery.

However, Dr. Thayer became the leading administrative assistant of Dr. Bennitt and took entire charge of some phases of the administration. There were two other competent admin-

istrative assistants. Dr. Isaac N. Himes was registrar and treasurer throughout the deanship of Dr. Bennitt. Dr. Frank Wells, another able man, was secretary of the faculty during five years of Dr. Bennitt's deanship.

These four men combined in an effective administration which brought many advances in the institution in the eight years that Dr. Bennitt was the dean. Dr. Bennitt was active before the public and in the profession. He was president of the county medical society during two terms, and he constantly attended the state and national medical meetings as a representative of the medical college. He frequently appeared before the Board of Trustees.

The deanship of Dr. Bennitt was not terminated by any dissatisfaction with his administrative actions, but because of a compact made necessary to secure the union of the two medical faculties in 1881. He served as dean from May 5, 1873, until July 7, 1881, eight years and two months.

He continued as Professor of Principles and Practice of Medicine until his death on May 5, 1892, at the age of sixty-two years. From 1881 to 1892 he was the leader of the Western Reserve group in the faculty in their continuing conflict with the group that had formerly been members of the medical faculty of the University of Wooster, and he was a member of important committees of the faculty.

He was in good standing in the profession, and had the confidence of the public. Personally he was well liked and avoided the quarrelsomeness that characterized some of his colleagues.

The faculty minutes adopted after his death deplored "the loss of one who has for so many years labored among us and has so faithfully and cheerfully borne a share of the cares and trials of our work." Many recorded items attest his faithfulness and cheerfulness during a membership of twenty-six years on the faculty.

William Johnston Scott, Dean 1881-83

Dr. Scott was born in Culpepper County, Virginia, on January 25, 1822. Records are in conflict as to whether his

middle name was Johnson or Johnston. The weight of evidence favors the latter form. His family brought him to Knox County, Ohio, in 1834, where he secured his education, largely in Kenyon College, located in that county.

He was graduated in arts with honors in 1848. He began medical study under the preceptorship of the professor of chemistry and geology at that college, who was also a local practicing physician. He was a tutor in Kenyon College during the year 1849-50, and then entered the Medical Department of Western Reserve College for the session of 1850-51. He returned to Kenyon College as a tutor from March to August, 1851. In 1851-52 he was Professor of Chemistry and Geology in Jefferson College, at Washington, Mississippi.

Returning to Ohio, he practiced medicine for two years in a village in the central part of the state, and then entered Starling Medical College, where he was graduated in 1855. Ten years of practice in a village near Columbus followed.[4]

Charity Hospital Medical College was opened in Cleveland in 1864 and Dr. Scott became Professor of Materia Medica, Pharmacy, and Botany. He moved his family to Cleveland in 1865. Dr. Addison P. Dutcher, Professor of Medicine, resigned in 1866, and Dr. Scott was transferred to this professorship, which he occupied until the union of the two medical faculties in 1881. He was secretary-registrar and chief assistant of the dean of the rival regular medical college from 1868 to 1881.

One of the factors that prevented consummation of the several efforts inaugurated between 1864 and 1879 to consolidate the two regular medical colleges was a disagreement as to which of the deans of the two participating institutions should become the dean of the single institution resulting from the proposed union. This question again arose in the negotiations in the spring of 1881 and was settled by agreement that neither of them should be eligible to election to this office.

There were several men in one or the other faculty who, by reason of ability and administrative experience, were suited for the office of dean. The united faculty elected Dr. Scott. He was fitted for the office, not only because of thirteen years of ex-

perience in an office of a medical faculty, but also because of other qualifications. He possessed equanimity of mind, and he had not been involved in the many quarrels in the local profession that had marked the past seventeen years. He was well known in the profession and was active in the city, state, and national medical societies. In 1876 he became president of the Ohio State Medical Society. He discussed medical education in his presidential address and gave his opinion that there were too many medical colleges and advised that some of them should be merged. He advocated reorganization of medical education, including the requirement of an entrance examination by all medical colleges, something then in force in few of them.[5]

The records show little of his activity during his short occupancy of the deanship. No problems of importance arose, and he had experienced and able administrative assistants. The records show no faculty election at the end of the session of 1881-82, but at an election on March 3, 1883, another man was chosen as dean. Dr. Scott had held the office since July 7, 1881, for one year and a little less than eight months. Nothing has been found to show dissatisfaction with his administrative efforts. He was a modest man, and the publicity attached to the office did not appeal to him.

Dr. Scott was scholarly, as shown by his taking honors in a college of arts of high standing and the occupation of a professorship in another college of arts. This is evident also in his many published articles on medical subjects, which are written in clear language and are logical in presentation of subject matter.

He was a man of dignified presence and a good public speaker, and his reputation as a skillful practitioner was more than local. He was held in high esteem by members of the medical profession and by the public at large, both for his professional and personal qualities. This is shown by the fact that Kenyon College in 1889 conferred upon him the honorary degree of Doctor of Laws, the highest honor that such a college could give.

He became Professor of Clinical Medicine and Principles of

Medicine in the united faculty in 1881, a position held until 1892, when he resigned on reaching seventy years of age and was made a professor emeritus. He was an excellent and forceful teacher, reputed one of the best in Cleveland during the twenty-eight years that he taught in one or another medical college in Cleveland. His popularity with students is shown by their giving him an affectionate sobriquet.

Dr. Scott had four children.[6] His only son was graduated in arts at Oberlin College and in medicine at the Medical Department of Western Reserve University in 1889 and later became a professor in the rival regular medical college for eight years and its dean for one year.

Dr. William J. Scott should not be confused with his distant cousin, Dr. Xenephon C. Scott, also a professor in both regular medical colleges in the 'seventies and 'eighties, though neither man served on the same faculty at the same time as his cousin.

Dr. William J. Scott died in Cleveland May 5, 1896, at the age of seventy-three years. The local newspapers and several medical journals recorded the high public estimation of him as physician, teacher, and citizen.[7]

Gustav Carl Erich Weber, Dean 1883-93

Dr. Weber was born at Bonn, Prussia, May 26, 1828. His father was a professor of anatomy in the University of Bonn for more than fifty years, and the early education of the young man was in that city. He left home at the age of twenty years on account of the revolution of 1848, going to Paris where he remained a year. He came to the United States in 1849. St. Louis had a large German colony and there, for a year or more, he was employed in a market garden. He received the degree of Doctor of Medicine in 1851 from St. Louis Medical College, then a proprietary institution which finally, after many changes, led to the present School of Medicine of Washington University.[8]

Dr. Weber said little about the source of his medical degree. In an autobiographical sketch in 1878 he does not mention it, but gives a detailed account of his later medical study in

Europe.[9] As a result, several writers have stated that he received his medical degree in Europe, citing different institutions. He received no European medical degree.

Immediately after his graduation in St. Louis he went to Europe and attended clinics in Amsterdam, Paris, and Vienna for two years. He did not return to Prussia because of the conditions under which he had left a few years earlier. In 1853 he returned to the United States and began practice with an elder brother in New York City. This brother died within a few months, but Dr. Weber continued general medical practice there until 1856.

His appointment as a temporary professor in the Medical Department of Western Reserve College in 1856 and his dismissal from that professorship in 1863 have been described in chapters VII and VIII.

The title which Dr. Weber held for a short time in the period of the Civil War is often mentioned.[10] He was a member of the staff of the Governor of Ohio, with the title of Surgeon General of Ohio, from January to early October, 1862, and then, after several attempts, was allowed to resign. In his letter of resignation he stated: "The health of my good wife is so precarious that she will require my constant care and attention for some time to come."[11] When the governor accepted the resignation, it was with the statement that it was done only because of the critical state of health of Mrs. Weber. Later, Dr. Weber stated that his wife's "health and the pressure of professional duties" compelled him to resign.[12] Mrs. Weber lived for more than fifty years after his resignation.

The founding of Charity Hospital Medical College by Dr. Weber in 1864 has been described in chapter XIII. He was Dean and Professor of Clinical Surgery in that institution until its closing in 1870, and then held the same position in the Medical Department of the University of Wooster until 1881.

He returned to a professorship in the Western Reserve medical faculty in the union of the faculties in 1881. No comment has been found explaining why Dr. Weber was selected as dean when Dr. Scott terminated his term in 1883, instead of selection

of Dr. Bennitt. Both had prior successful experience in medical school administration and Dr. Bennitt was the older man. It seems probable that Dr. Weber sought the position because of his desire to lead in any enterprise with which he was connected. He became dean March 3, 1883, and resigned September 9, 1893, after serving in the office ten years and six months. The fact that Dr. Weber had so large an influence in the years that he was dean has made it necessary to give considerable detail of his administrative activities in the narrative chapter of his deanship, chapter IX. It is not necessary to review these acts here. More than that of any other dean in the hundred years, this administration was influenced by the personality of the dean.

He was an emeritus professor on the medical faculty of the University of Wooster from 1893 until acceptance of his resignation in May, 1895. That University conferred upon him the honorary degree of Doctor of Laws in 1877. He was a trustee of Western Reserve University from 1884 to 1893. He was the dean in one or another of the medical colleges of Cleveland continuously from 1864 to 1893, with the exception of the two years from 1881 to 1883, a total occupancy of this office of twenty-seven years.

Dr. Weber was an excellent clinical teacher and in the many years that he taught he had a large influence upon the development of surgery in northern Ohio. He was connected with the staffs of different hospitals in Cleveland continuously from 1865 to 1895.

A good diagnostician and a skillful surgeon, he was claimed by his admirers to be the best surgeon in northern Ohio. His teaching was confined to clinical surgery. His favorite method was with the patient before him in the amphitheater, where he made a profound impression upon his students. His remarkable personality and air of dignity produced notable effects both at the teaching table and in public.

In nearly every medical college, surgery was taught under a professorship of principles and practice of surgery, and this was the title which Dr. Weber held in the Medical Department of Western Reserve College from 1856 to 1863. However, when he

came successively to direct the medical colleges in which he taught, he chose the title of Professor of Practical Surgery, or, more usually, that of Professor of Clinical Surgery, confining his teaching to a part of the field only. During twenty-eight years of his teaching career, some other member of the faculty taught the principles of surgery.

His published writings are confined to a few articles on clinical surgery in medical journals. He established the *Cleveland Medical Gazette* in 1859, the first medical journal in the city. He was its editor for two years, when it was merged with a journal at Cincinnati of which he was co-editor for another year. He was one of the more prominent German-born citizens of Cleveland and was connected with several German social and charitable organizations.

Another side of Dr. Weber is to be mentioned if his career in medical education is to be understood. He insisted on ruling any organization with which he was connected. For instance, he demanded that he personally should control the income of the endowments received by the trustees in 1892. He was a helpful and delightful associate to those who freely acknowledged his leadership, but intolerant toward any who opposed him. Once he had expressed his views, he expected everyone to accept them, and those who did not became objects of his displeasure.

Many loyal friends were disappointed when he indulged in his quarrelsome attitudes which caused, periodically, neglect of teaching and administrative duties. He had many contentions with his colleagues throughout his teaching career, most of whom acceded to his wishes to avoid continued quarrelling. Some who would not, when he held an administrative position, were soon forced to resign.

This strong personality brought ardent friends as well as much criticism. The expressed and recorded opinions of Dr. Weber are widely variable because they were influenced by different factors in his activities.

President William McKinley appointed Dr. Weber in 1896 as United States consul at Nuremberg, Germany. The four

years in his native land, free from the strife of medical politics, were happy years for Dr. Weber. On his return members of the medical profession gave a dinner of welcome at the Cleveland University Club. Several of his old friends made congratulatory remarks. Then came tragedy. When Dr. Weber arose to respond he sank to the floor with a cerebral hemorrhage. The resulting hemiplegia made him inactive during the remaining twelve years of his life. He lived in his country home in Willoughby, where many of his friends called on him until his death on March 21, 1912, at the age of nearly eighty-four years.

Dr. Weber had two children, a son and a daughter. The son, after attending several medical colleges in America and Europe, was graduated at the Medical Department of Western Reserve University in 1887 while his father was professor and dean in this medical college. This son did not enter practice before his death a year later.

Dr. Weber had much influence in Cleveland during nearly forty years, both upon medical practice and medical education. Some of it was detrimental, but when all—professional, teaching, and administrative—is summed up, the balance is on the beneficial side. The reader must judge from what has been written in earlier chapters, where the balance lies in his influence upon the Medical Department of Western Reserve University.

John Pascal Sawyer, Vice-Dean 1893-95

Dr. John Sawyer was born at Kent, Ohio, April 10, 1862, the eldest son of Dr. Pascal Hall Sawyer (1832-1905). The father was a graduate of the Medical Department of Western Reserve College in 1858, an instructor for one year in 1880-81, and later a professor in the Medical Department of the University of Wooster from 1889 to 1893.

John Sawyer was graduated from the Cleveland Central High School in 1879 and from Adelbert College of Western Reserve University in 1883. Entering the medical department of the university, he was graduated in medicine in 1886. He took the graded course, optional at that time, and the records show high grades in examinations. Following a year and a half as interne

in a Cleveland hospital, he went to the University of Berlin to study physiology, pathology, and bacteriology during a year. On his return he began teaching physiology in 1888 and entered upon medical practice.[13]

Dr. Sawyer is the only man in the history of the institution who has held the title of vice-dean. Dissatisfaction with the administration of Dr. Weber led the trustees to appoint him to this title in June 1893, with instructions to take charge of the medical school for a year. This was the first appointment by the trustees of an officer to the medical faculty; all previous officers had been elected by the faculty.

A new and satisfactory dean replaced Dr. Weber in September 1893, but Dr. Sawyer continued to carry part of the administrative work during the two years that dean served, until 1895. The title of vice-dean was not attached to his name after 1895.

When the vacancy arose in 1895 Dr. Sawyer was considered ineligible because he was then only thirty-three years of age. Tradition at that time held that a dean must be well over forty years of age.

Nevertheless Dr. Sawyer became the chief administrative assistant of the older man appointed to the office during the next five years. With appointment of another dean in 1900 Dr. Sawyer became one of his two chief advisers, and so continued until 1912. He was an adviser, in a less intimate relation, of the dean who served from 1912 to 1928. Therefore, although holding an administrative title for only two years, he was a participant in the administratin of the medical school during thirty-five years. Some of his many and varied helpful acts during these years have been mentioned in the narrative chapters.

He was an active teacher in the institution for forty-four years, five of them in physiology and thirty-nine years in medicine and therapeutics. He served on the staff of City Hospital in the 'nineties and on the staff of Charity Hospital for nearly forty years, in later years as chief of the medical service, and from 1930 to 1932 as chief of the staff.

As this is written, in 1944 Dr. Sawyer is the only man living

who has retired from a high administrative position in the medical school. He practiced medicine in Cleveland from 1888 until he retired from practice in 1940, a span of fifty-two years. He was active in the local medical society and in the founding and development of the Cleveland Medical Library. He held many offices, including the presidency in each of these organizations. (Dr. Sawyer died in Cleveland, June 17, 1945, aged eighty-three years.)

Isaac Newton Himes, Dean 1893-1895

Dr. Himes was born at Shippensburg, Pennsylvania, December 4, 1834. His father was an extensive owner of coal mines in West Virginia. He entered the college of arts of the University of Pennsylvania and transferred to Jefferson College at Canonsburg, Pennsylvania, where he received the degree of Bachelor of Arts in 1853. After study under a preceptor, he enrolled at the Medical Department of the University of Pennsylvania and later transferred to the College of Physicians and Surgeons of New York City, where he was graduated in 1856. A year and a half in Bellevue Hospital followed. Then he practiced medicine for a year before he returned to further study as resident physician in another hospital in New York City.

He began practice in his native town, but in the spring of 1861 moved to Chillicothe, Ohio, where his cousin and classmate in undergraduate college, Dr. David H. Scott, was in practice. In September 1861, he entered the army as surgeon of an Ohio regiment and soon became the surgeon of a division. After three years in the army he resigned with the rank of major and returned to his practice in Chillicothe.

Dr. David H. Scott was a professor in the Medical Department of Western Reserve College in 1863-64 and at the end of that session was transferred to another professorship. Dr. Himes was brought to fill the vacancy left by the change of subjects by his cousin, and taught physiology and some anatomy in the session of 1864-65, after which he returned to his practice in Chillicothe.

Dr. Himes was always a student, and, desiring more training in medicine, in 1866 he went to Europe and studied in Paris

and Vienna for two years, giving attention not only to clinical medicine but also to physiology and pathology and becoming familiar with the French and German languages.

On his return to the United States he traveled extensively seeking a favorable location, and in 1869 he began practice in San Francisco, a city then entering upon a period of growth because of the completion of the transcontinental railway.[14]

The professor of physiology and histology in the Medical Department of Western Reserve College, who lived in another city, was irregular in attendance on his teaching, and in 1870 Dr. Himes was recalled as lecturer in these subjects and succeeded to the professorship in 1871. In 1873 pathology was added to his professorship. His interest in that subject is shown by his organization in 1873 of the Pathological Society, which met alternately at the two different hospitals controlled by the two rival regular medical colleges. This later became the Cleveland Academy of Medical Sciences, of which Dr. Himes was long the president, and after another change of name was merged with another medical society to form what is now the Cleveland Academy of Medicine. Also Dr. Himes started the first medical library in Cleveland as a section of Case Library. He became a member of the staff of the Cleveland City Hospital (now Lakeside Hospital) in 1873.

Dr. Himes after 1881 restricted his teaching to pathology, except that from 1881 to 1883 he also taught orthopedic surgery. He spent another year of study in Europe in 1889-90. He was able to go to Europe twice for study and to do many other things because he was a man of considerable wealth for those times. The inventory of his estate showed over $100,000.

The vacancy in the deanship arising from the resignation of Dr. Weber early in September, 1893, was immediately filled by the appointment of Dr. Himes by the trustees. He was eminently fitted for the position by personality, education, and experience. Dr. Himes was "an erudite scholar, a master of broad and well adjusted attainments, not in his cherished profession alone but in philosophy, history and languages." To this statement by a colleague should be added English literature and

poetry. He was distinctly a cultured man. He wrote shorthand in which his records are annotated, an unusual accomplishment for a physician of that time.

He had the confidence of all of his colleagues and the affectionate friendship of many of them. He was well known to several of the trustees of the university through association with them in their other capacity as trustees of the hospital where Dr. Himes was a member of the staff for twenty-two years and secretary of its Board of Trustees for nine years.

He was amiable, quiet, and extremely modest. He was zealous and firm in his convictions, with the art of carrying them through without arousing contention.

Dr. Himes had long been an advocate of modernizing the curriculum and the medical college. Younger and well-trained members of the faculty had similar ideas but Dr. Himes was the only one of the older men supporting this policy, and he was the leader of the group. The majority of those opposing innovation had resigned in the summer of 1893 and Dr. Himes was the logical man to lead the new program. He had experience in faculty offices, having been registrar and treasurer from 1873 to 1883. He had been president of the Ohio State Medical Society in 1887-88 and was well known to the medical profession.

His service as dean was unfortunately short, less than nineteen months. According to the diary of his wife he had experienced the first symptoms of cardiac disease in 1888. These were repeated at progressively more frequent intervals, but he advised none of his colleagues of his condition. He maintained his many activities in medical practice, in teaching, and in his duties connected with the administration of the medical school, the work of the hospital, and a medical service to a large charitable organization of his church until the day before his death on April 1, 1895, at the age of sixty years. He is the only dean in a hundred years of the medical school who has died in office. His death so early in the period of modernization of the medical school was a serious loss and deprived it of the enthusiastic and competent leadership of its most experienced officer.

Printed testimonials of many organizations and prominent citizens showed the high station that he held in public esteem.[15] Two of them are here quoted.

Dr. Himes in his medical practice "was painstaking and devoted both in the general management and in the details of treatment of his patients, ever ministering to those with a kindness and sympathy that made him a type of what a physician should be. In emergencies this quiet reserved man could rise to any height of responsibility required by the occasion and with clear and steady mind to plan could wield finger or scalpel with a decision and dexterity surpassed by few."

The bishop of the Episcopal Church, in which Dr. Himes was an active worker, said of him: "He was a true, kind, gentle, thoughtful physician . . . a leader in his noble profession, and characterized by goodness and benevolence."

Dr. Himes was married in 1878 at the age of forty-five years to Mrs. Mary Vincent Read, the daughter of a prominent business man of Cleveland. They had no children. Mrs. Himes survived her husband more than thirty years.

Hunter Holmes Powell, Dean 1895-1900

Dr. Powell was born in Middleburg, Virginia, December 16, 1843. His early education was under a private tutor, followed by attendance in two academies in Virginia. He entered the Confederate Army in May, 1862, and served until he was wounded and captured two days before Lee's surrender in 1865.

The medical colleges of southern states were in a serious condition after the Civil War. One of the better of them was the Medical College of Virginia, at Richmond. Dr. Powell was graduated at this institution in 1867. He practiced in two places in Virginia for five years. During part of this time he taught chemistry in an academy.[16]

He decided to come to Ohio, which had suffered much less from the war than had Virginia. His early plan was to settle in the southern part of the state where there were many people of Virginian descent. However, after visiting several cities in

Torald Hermann Sollmann, Professor, 1904-1944; Dean, 1928 to 1944

Ohio seeking a location, he settled in Cleveland in 1872. Soon after coming he became a teacher of anatomy and physiology in an academy in Cleveland while beginning the general practice of medicine.

His charming manner soon won him friends both in the medical profession and among the laity, although he had been a soldier in the Confederate Army and feeling against the South was still intense in Cleveland in the early 'seventies.

He was invited to become Lecturer on Diseases of Children in the Medical Department of Western Reserve College in 1874, although he had no especial training in that field. Dr. Powell told me that the first lecture he ever heard on the diseases of children was the one he gave at the opening of his course. He was promoted to a professorship in 1875, and in 1878 obstetrics was added to his duties, with the title of Professor of Obstetrics and Diseases of Children. Although these two subjects remained in his title until his resignation in 1907, he gave diminished attention to pediatrics after 1893, and beginning in 1896 his teaching was largely restricted to obstetrics although at several times he did some teaching in general medicine. He was a member of the staff of Cleveland City Hospital and its successor Lakeside Hospital from 1879 until his retirement, and for several years was chairman of the staff.[17]

The trustees elected Dr. Powell to the deanship two weeks after the death of Dr. Himes. Dr. Powell at this time was fifty-one years of age. He had been a member of the faculty for seventeen years. He was secretary from 1878 to 1881, librarian —a minor office—from 1881 to 1883, and registrar and treasurer from 1883 to 1895. He had also been a member of the executive committee of the faculty from 1893 to 1895.

His selection came as a result of his maturity, his long membership in the faculty, his long service in offices of the faculty, and the regard in which he was held by some members of the executive committee of the Board of Trustees, which committee made the appointment.

Dr. Powell was not of the administrative type. He was mild of manner. To strengthen his office the faculty appointed a

committee on administration consisting of Dr. Powell and two other members of the faculty. Dr. John P. Sawyer was chairman of this committee and the moving spirit in the advances which were made in the next five years during the conduct of the medical school by this committee.

Also a financial committee was appointed to take charge of expenditures. It introduced a budget system of control. The trustees in 1900 created a new office of executive officer of the faculty and preferred that this should be combined with the deanship. Dr. Powell notified the trustees that he did not wish to assume the additional duties and his term as dean ended in June 1900, after occupancy of the office for five years and two months.

At the end of his service President Thwing made the following comment: "Dean Powell has served the Medical School with constant faithfulness in a noble sense of responsibilities of the office, in a mood of friendliness and of characteristic graciousness toward everyone associated with the school."[18]

Dr. Powell had a delightful personality. He was the typical cultured Southern gentleman and well liked by all his colleagues. He was also well regarded by the laity and had an extensive practice. He was long considered the leading obstetrician of the city.

He was a man of modesty and of small stature. He was not an especially forceful teacher. In his teaching he gave attention largely to the art of obstetrics. Little was then known of many features of the science of this subject which are now a part of every course of instruction.

Dr. Powell resigned his professorship in 1907 after being a member of the teaching staff for thirty-three years. He was made an emeritus professor. In 1894 he had received the honorary degree of Master of Arts from Western Reserve University.

He continued to reside in Cleveland, giving diminishing attention to medical practice, until his death on January 9, 1915, at the age of seventy-one years. He was married in 1874 soon after he came to Cleveland, to a woman from his birthplace.

Benjamin Love Millikin, Dean 1900-12

Dr. Millikin was born at Gustavus, Trumbull County, Ohio, December 24, 1851. He was graduated from the high school at Warren, Ohio, and then attended Allegheny College where he received the degree of Bachelor of Arts in 1874. A year later he began medical study with a physician in Warren and soon entered the Medical Department of the University of Pennsylvania, where he was graduated in 1879. He served in three different hospitals in Philadelphia continuously from October 1879 to April 1882, the last service as resident surgeon at the Wills Eye Hospital.[19]

He located for practice in Cleveland in the spring of 1882. A considerable part of the next year was spent in the study of ophthalmology in Europe. In 1889 he again spent six months in European hospitals. His consecutive practice in Cleveland began in November 1883 and continued until his death thirty-three years later. For a time he practiced two days of each week in Youngstown. Dr. Millikin had excellent training in his specialty and became the leading ophthalmologist of Cleveland.

Dr. Millikin was connected with hospitals in Cleveland for more than thirty years. This began with work in the dispensary of Charity Hospital in 1884. When the dispensary of the medical college opened in the new building in January 1887, Dr. Millikin was in charge of ophthalmology. He was visiting ophthalmologist at various times at Charity Hospital, St. Alexis Hospital, St. John's Hospital, and Cleveland City Hospital before its name was changed to Lakeside Hospital in 1889. He was visiting ophthalmologist and head of the service at Lakeside Hospital until his death.

Several years of successful teaching in the dispensary caused those who knew of his work to propose his formal appointment in 1890 on the medical college faculty with a teaching title. The older man then holding the professorship of ophthalmology objected, and the appointment was not made. However, in July, 1893, Dr. Millikin was appointed Professor of Ophthalmology and the older man soon resigned.

The vacancy in the deanship in 1900, caused by Dr. Powell's declining to assume the additional duties of the new office of executive officer, was filled by appointment of Dr. Millikin in June, 1900. He was then forty-eight years of age. He had held no office in the faculty but had been a member of many important committees in the seven years since he had joined the faculty. He was chairman of several of these committees and was occasionally sent as the delegate of the faculty to educational meetings. An indication of the reasons for his selection is found in a comment of President Thwing, who said that Dr. Millikin "would bring to the office a high ideal of scholarship both general and professional, a determination to promote the best interests of the Medical School and an intimate acquaintance with the conditions of medical education both in this neighborhood and throughout the world."[20]

His twelve years as dean were in a period of continued advance in the institution, with one critical period. His annual reports to the trustees show his wide interest and knowledge of many things that affected the prosperity of the institution under his direction. He discussed some features of medical education in each one of these reports and summarized much information. Dr. Millikin was attentive to his duties, which were somewhat lessened as to details by changes in the lower administrative offices of the faculty in 1907. At the end of twelve years he stated that he had been absent from only three faculty meetings in that interval.[21]

Dr. Millikin was one of the most successful deans of a hundred years. His administration was effective and he was constantly cognizant of the many details in the operation of the medical school. His unselfishness, sound judgment, broad views, and efficient activity were a large factor in the progress of the institution during his administration, in which no dissensions arose. This progress would have been inhibited by a man of narrow and selfish views. He constantly consulted other members of the faculty and also several members of the Board of Trustees, with whom he was well acquainted.

His resignation from the deanship came from no dissatisfac-

tion with his administrative service but was due to ill health. He resigned from his professorship at the same time, but continued his connection with Lakeside Hospital and did not abbreviate his practice until a short time before his death.

When Dr. Millikin resigned, President Thwing wrote as follows :"Dr. Millikin is the fourth of those who have filled the office of Dean in the last twenty years. His term has been distinguished by great changes in the character and position of the school. The school has come to be acknowledged as one of the great schools of the country and the world. That in this progressive movement the school has been saved from mistakes and errors of judgment is due in no small degree to the conservatism and sobermindedness of the Dean."[22]

Three striking characteristics were prominent in Dr. Millikin, modesty, kindliness, and an even temper. He sought no acclaim, yet many honors came to him unsought, and he participated and was a leader in many activities connected with the medical profession. I had five years of intimate contact with him in the administration of the medical school, and I never saw him show signs of anger or perturbation, although these would have been warranted on some occasions.

He was active in the local medical society and was its president at one time. He was the leading cooperator with Dr. Dudley P. Allen in the plans for and the inauguration of the Cleveland Medical Library. Dr. Millikin gave much attention to the development of this institution and was its president during two terms.

Dr. Millikin died in Cleveland, January 6, 1916, at the age of sixty-four years, following a period of declining health extending over several years, yet he maintained his professional practice until a few days before his death.

Carl August Hamann, Dean 1912-28

Dr. Hamann was born in Davenport, Iowa, January 26, 1868. His parents were both born in Germany. His maternal grandfather was a physician, which fact influenced Dr. Hamann in entering the medical profession. His father was a manufacturer.

He was graduated from the high school at Davenport, in 1886, and then taught school in a country district for a year. His father wanted him to study law, and he began study under an attorney who acted as a preceptor, but he abandoned it after a few months and turned to his personal desire to follow his grandfather in medicine.

He entered the Medical Department of the University of Pennsylvania in 1887 and was graduated in 1890. His class contained a hundred and fifteen men, of whom twenty-eight were college graduates. He received at graduation the alumni medal for passing the final examinations with the highest average, and also honorable mention was given to him in connection with another prize.[23]

In competitive examinations he secured appointment at two hospitals, and chose the German Hospital of Philadelphia because he believed it afforded better opportunities in surgery. During his internship of a year he was for a time acting resident during the temporary absence of the regular resident. In this year he made a compilation from the records of all the cases in surgery, for which the staff and trustees gave him high praise. During 1891-92 he was resident surgeon in the Hospital for Children, of Philadelphia. Also he conducted a private quiz course in anatomy. In 1892-93 he was Demonstrator of Anatomy at his alma mater and continued his private quiz course. He entered practice in Philadelphia in 1893, continuing to serve as demonstrator of anatomy and maintaining his quiz course. In all features of his work in Philadelphia he was highly successful.

Dr. Hamann came to Cleveland in September 1893, as Acting Professor of Anatomy, and was promoted to the professorship of the subject a year later, when he was twenty-six years of age. He was the youngest man made a professor in this institution in a hundred years. On arrival in Cleveland he immediately began work in surgery in the college dispensary. In April 1894, six months after arrival, he was appointed on the staff of City Hospital and began the practice of surgery. The summer of 1894 was spent in clinics in Europe. He became a member of the

staff of Charity Hospital in 1897 and continued on the staffs of Charity Hospital and City Hospital until his death. He was chief of staff in both hospitals during many years.

Dr. Hamann was immediately successful in his teaching, and his success increased with the years. His conception of teaching led him to emphasize applicability to practice. He inaugurated a course in applied anatomy given in the second and third years of the curriculum, a course that for many years was the most popular in the curriculum. In his teaching he demonstrated the comprehensiveness of his knowledge. He wove together descriptive, comparative, and human anatomy, embryology, physiology, pathology, surgical diagnosis, and clinical surgery. In his teaching of clinical surgery he was equally expert.

His popularity is shown by the fact that the students gave him the sobriquet of "the king." He was the outstanding teacher in the beginning of the second half-century of the history of the medical school, as Dr. John Delamater was in the beginning of the first half-century.

He resigned the professorship of anatomy as far as it concerned descriptive anatomy in 1911, and was appointed Professor of Applied Anatomy and Clinical Surgery, which subjects he continued to teach until his death. His teaching career covered over thirty-six years in this school.

Dr. Hamann was appointed to the deanship in June 1912. Several qualities influenced this choice. He had the confidence of trustees and faculty. He was an outstanding teacher of both a laboratory and a clinical subject. He was popular with students, alumni, and laity. He was intimately connected with two of the three hospitals in which medical students were taught. He had a personality which permitted him to accomplish much without controversy.

His deanship included busy years in the medical school, involving many advances and the moving to the new building. Dr. Hamann desired to resign as dean in 1924, but his resignation was postponed until November 1928 when he had served sixteen years and five months, the longest service in the office by any man in the history of the institution.

His desire to resign was in part because of an excessive load of work in teaching, administration, and practice. Also he wished to review the records of thirty years of practice, especially those in surgical diagnosis, and he planned to publish a book on the subject, citing many of his own cases. This work had been partially compiled at the time of his death.

Dr. Hamann was a man of great industry. His work in a large surgical practice was evident. He was equally diligent as a student not only of surgery but of many other phases of medicine. He work assiduously until two weeks before his death from coronary occlusion, an ailment of which he had been aware for several years, on January 12, 1930, at the age of sixty-two years.

His personality was one of quiet and modest reserve. He had a fine sense of humor. He was not loquacious, but analyzed things constructively. This is evident in his terse annual reports as dean. He was painstaking in all matters and especially attentive to his patients.

In all his activities connected with the medical school, the hospitals, and other medical organizations he gave not only his thought, time, and personal energy but also much of his money. Each year he turned back the entire salary that he received as an administrative officer. His contributions of money were many and generous to the medical school and to other medical activities, and his private benevolences were multitudinous.

He entered into many activities. He was a trustee of the university by nomination of the university faculty from 1921 to 1927. He was active in the medical societies and was president of the local society. He was much in demand as a speaker before medical societies, not only in Ohio but in other states. His ability in operative surgery and in surgical diagnosis was widely known, and at the time of his death he was vice-president of the American Surgical Society.

He was greatly interested in the Cleveland Medical Library, of which he was one of the early members and later president. He was directing librarian during many years, and largely influential in building up the collections.

Dr. Hamann was married in 1900. Of his two children, his daughter was graduated in the college of arts of Western Reserve University and his son, Dr. Carl A. Hamann, Jr., was graduated at Princeton University in 1930 and at the School of Medicine of Western Reserve University in 1934, and has followed his father in extensive training in surgery.

The Cleveland Chamber of Commerce each year confers a "medal of public service" upon some citizen in recognition of extensive service to the city and its institutions. It conferred this medal posthumously upon Dr. Hamann on April 15, 1930. The following citation shows the esteem in which Dr. Hamann was held by those outside the medical profession:

> As a beloved physician, exemplar, and friend, for nearly forty years, countless individuals in all walks and stations of life have profited by his skill regardless of financial reward. His time and energy were given unstintedly to the organization and work of Charity and City Hospitals.
>
> His influence as a forceful and highly respected teacher in Western Reserve Medical School has left its mark upon a whole generation of physicians and through them to the community in the direction of high unselfish service.
>
> In the scientific field his fame as an anatomist and surgeon has added luster to the name of Cleveland.

Torald Hermann Sollmann, Dean 1928-44

Dr. Sollmann was born at Coburg, Germany, February 10, 1874, the son of a teacher. His early education was in the gymnasium of that city. He came to the United States at the age of thirteen years to join an elder brother, who was a pharmacist at Canton, Ohio.

He was graduated from the high school at Canton in 1893. The year 1893-94 was spent in study of chemistry, pharmacy, and medicine in Paris. He also studied in Strassburg during five months in 1899.[24]

He entered the Medical Department of Western Reserve University in September 1894, with advanced standing, and received the degree of Doctor of Medicine in 1896.

During his senior year he was a student assistant in physiology and for two years after graduation was Demonstrator of Physiology and Histology. A laboratory of pharmacology and ex-

perimental therapeutics was organized in the medical school in 1894 and put in charge of a graduate of the school, who resigned in 1896 to accept a professorship in the rival regular medical college. He was succeeded by another alumnus who resigned in 1898. Dr. Sollmann was chosen to take charge of this work and to establish a department of pharmacology and associated subjects. His first title was Lecturer on Pharmacology. He became Assistant Professor of Pharmacology and Materia Medica in 1901, was promoted to an associate professorship in 1903 and to a full professorship in 1904. In June 1944 he will complete his forty-eighth year on the teaching staff, the longest teaching service of any individual in the institution.

He published his *Textbook of Pharmacology* in 1901 which, with a change of title, has gone through eight editions and has become the leading American textbook in this subject. Dr. Sollmann has engaged in research for more than forty years and has published many papers in scientific journals. He has also served on an important committee of the American Medical Association during many years and as chairman of a national committee connected with medical education.

Of the nine men who previously occupied the deanship all were teachers of clinical subjects except Dr. Cassels, the dean from 1861 to 1873, and Dr. Himes, the dean from 1893 to 1895. In November, 1928, the appointment of Dr. Sollmann, a professor in a laboratory subject, broke the precedent of thirty-three years. Dr. Sollmann is the second graduate of this medical school who has occupied the office of dean; Dr. Bennitt, the dean from 1873 to 1881, was also an alumnus.

At the end of the first year in the deanship Dr. Sollmann presented an extensive report of fifty-eight printed pages containing much statistical information and discussion of many things that affected the operation of the medical school.[25] A year later a similar report nearly as long discussed other matters.[26] These two reports gave an excellent summary of conditions under which the administration of Dr. Sollmann as dean began, and gave promise of a comprehensive administration.

Dr. Sollmann has given more time and personal attention to

the office of dean than any of his predecessors. He is the only man who has not also practiced medicine or engaged in a supplementary private service outside the medical school during his deanship. Dr. Sollmann is a member of all eight of the standing committees and chairman of two of them. He has performed the detailed duties of the admission of students throughout his administration and has had the personal duty of formulating the budget since 1931.

He is much in favor with colleagues, alumni, and students. His service as dean, when he retires in June 1944, by reason of the university rule regarding age limit, will have extended over fifteen years and seven months; only two deans have served longer terms, Dr. Delamater and Dr. Hamann.

Dr. Sollmann received the honorary degree of Doctor of Science from the Ohio State University in 1934 and the honorary degree of Doctor of Laws from Western Reserve University in 1943.

Summary

The first two of the ten deans each served two terms. The terms of Dr. Cassels were separated by an interval of seventeen years, and those of Dr. Delamater by an interval of seven months.

Two of the ten deans were born in New York, two in Virginia, and one each in Iowa, Ohio, and Pennsylvania. Three were born in Europe: two of them in Germany and one in Scotland. Their ages at election to the office of dean varied from thirty-four years and ten months for Dr. Cassels at his first election to sixty years and one month for Dr. Scott. Dr. Bennitt, Dr. Millikin, and Dr. Hamann were less than forty-nine years of age when elected. Dr. Delamater, Dr. Scott, Dr. Weber, Dr. Himes, and Dr. Sollmann were over fifty-four years of age when elected. The average of ages at election was fifty years and nine months.

Two of the deans were graduates of the present School of Medicine of Western Reserve University, and two of the Medical Department of the University of Pennsylvania. The other medical colleges represented by graduates in the deanship were:

Berkshire Medical Institution, College of Physicians and Surgeons of the Western District of New York, Starling Medical College, St. Louis Medical College, College of Physicians and Surgeons of New York City, and Medical College of Virginia. Three of the number were graduates of a college of arts: Dr. Scott, Dr. Himes, and Dr. Millikin.

Professorships of medicine, surgery, and obstetrics each furnished two deans, and professorships of chemistry, pathology, ophthalmology, and pharmacology each furnished one dean.

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XIX

RETROSPECTION

THE END of the session of 1892-93 completed fifty years of teaching in the Medical Department of Western Reserve University. However, the final months of this session were occupied with dissension in the faculty which made the time unpropitious for any celebration.

In October 1893, a committee of the faculty was appointed to arrange a semi-centennial observance at the close of the session, really the end of fifty-one years. The observance was combined with the Commencement and the meeting of the Alumni Association on February 28, 1894. An address was delivered by Dr. William H. Welch, Professor of Pathology in the Johns Hopkins University, on "The Needs of a Medical College," and historical addresses by Dr. Erasmus D. Burton, of the class of 1846, and Dr. John C. Reeve, of the class of 1850.[1]

Observance of the Centennial

On October 21, 1938, five years in advance, the faculty voted to appoint a committee to arrange for observance of the centennial of the School of Medicine of Western Reserve University. President Winfred G. Leutner appointed Dr. Howard T. Karsner, Professor of Pathology, as chairman of the committee.

The normal time for such observance would have been in connection with the graduation of the one hundredth class in June 1943. However, the adoption of the accelerated program brought this graduation in February 1943. A date shortly following this was chosen and announced, but later changed to the last week in October 1943. This was as near as feasible to the one hundredth anniversary of the beginning of instruction on November 1, 1843.

The Association of American Medical Colleges, in the founding of which this medical school participated in 1877, held its annual meeting in Cleveland, October 25 to 27, a meeting that

brought a large number of medical educators to Cleveland. The final meeting of the Association was held early in the forenoon of October 27, and was immediately followed by the first number in the observance of the centennial.

The early plans were to have a series of events extending over three or more days, but conditions due to the war brought decision to abbreviate the formal observance to one day, followed by a day given to the meeting of the alumni and Commencement.

In the forenoon of Wednesday, October 27, Dr. George Hoyt Whipple, Dean of the Schools of Medicine and Dentistry of the University of Rochester, gave an address upon "Blood Plasma Proteins." This was followed by a complimentary luncheon for the delegates and guests.

A university convocation was held in Severance Hall in the afternoon. Dr. Howard T. Karsner, Professor of Pathology and the chairman of the committee of arrangements, gave a brief address outlining the contributions of the medical school during a hundred years.[2] This was followed by an address by Dr. Alan Gregg, Director of the Medical Sciences, Rockefeller Foundation, on the relations of medicine to educational, cultural, and financial aspects of present-day civilization.[3] President Leutner then conferred honorary degrees on five persons. Dr. Whipple and Dr. Reginald Fitz, Assistant Dean of Harvard Medical School, received the degree of Doctor of Science. Dr. Torald Sollmann, Professor of Pharmacology and Dean of the School of Medicine of Western Reserve University, received the degree of Doctor of Laws, and Dr. William T. Corlett and Dr. Frederick C. Waite, both emeritus professors of the medical faculty, received the degree of Doctor of Humanities.

Accredited delegates of 138 colleges and universities and of twenty-one state and national associations attended the convocation, as did also official representatives of several foreign governments.[4]

The centennial dinner was held in the evening with an attendance of over four hundred. Addresses were given by President Leutner[5] and by Dr. Reginald Fitz, Lecturer on

Medical History and Assistant Dean of Harvard Medical School, in which he traced the mutual relations between Harvard Medical School and the School of Medicine of Western Reserve University during a hundred years.[6]

October 28 was devoted to the alumni. In the forenoon a series of scientific addresses were given by six distinguished alumni: Marion A. Blankenhorn (1914), Professor of Medicine, University of Cincinnati; Frank P. Corrigan (1906), Ambassador to Venezuela; Daniel B. Kirby (1916), Professor of Ophthalmology, New York University; Horace N. Korns (1918), Professor of Medicine, University of Iowa; Roy W. Scott (1913), Professor of Medicine, Western Reserve University, and Ralph W. Waters (1912), Professor of Anesthesiology, University of Wisconsin.

In the afternoon the one hundred first Commencement was held, at which an address was given by Louis J. Karnosh (1920), Associate Clinical Professor of Nervous Diseases, Western Reserve University. The members of this class of sixty-six entered in September 1940, and normally would have been graduated in June 1944, but the accelerated program brought their completion of the course nearly eight months in advance of the normal time.

The alumni dinner was held in the evening and was attended by over four hundred members. An address was given by Frederick C. Waite, Emeritus Professor of Histology and Embryology, "Episodes in One Hundred Years." This ended the formal observance of the completion of the first century of the medical school.

When the early plans were made in 1938, it was proposed that a history of the school should be written by someone and published at the time of the centennial. The person to write this was not designated until 1942. At that time I was engaged in writing another volume of the history of Western Reserve University[7] and it was impossible for me to complete the writing of a history of the medical school in time for publication in October 1943. Therefore completion of the manuscript of the final item in the observance of the centennial has been delayed

until February 1944, several months beyond the lapse of a hundred years of the institution. The publication of this volume completes the observance of the centennial.

Looking Backward

As one traces the path of a hundred years of progress of the School of Medicine of Western Reserve University, he finds that it was by no means a smooth and level road. At times the institution, after a slow upward climb, reached peaks of success, only to descend into a morass that seemed ready to engulf a struggling enterprise.

Along this road one finds multitudinous events, major and minor, each with causes and results large or small. In the belief that history is more than mere annals, I have tried to discover the causes of the major occurrences of the life of the institution. At times the causes are obscure because of lack of adequate records; more usually the causes are patent if one analyzes what has gone before. It seems unfitting at this time to state the causes of some more recent events. Not all the causes lay within the institution itself; some were national in origin, such as wars, economic depressions, and educational advances that affected all institutions.

Along the road are many men, some leaders, others stragglers. Some remained long with the institution to its great benefit; others left after a short sojourn. A few stayed too long for the welfare of the school. The chief attention given to men is to those who were founders, or were in administrative positions, or rose to professorships. A few who had responsibilities commensurate with those of a professor, although not attaining that title, are given some attention. For one who is an assistant it is difficult to determine how much of his activities were due to his own initiative and what part to the direction of his immediately superior officers. Some of these men died before I was born and more before I became connected with the teaching staff. However, I have found authentic records of many of this group in sufficient numbers almost to make me feel that they were my personal acquaintance.

Among these scores of men are many of such towering stature in their services as to attract immediate attention. A very few were so swollen with selfishness and conceit that they appear grotesque in comparison.

Ninety-seven men have reached the grade of full professor in the hundred years. Twenty-two had died and ten had left the faculty but were still living when I joined the teaching staff in 1901, the fifty-eighth year of the school's life. I knew two of this group of ten. Therefore I have personally known all but thirty of the professors in the medical school.

My acquaintance with these men varied in degree. However, from the knowledge that I have gained concerning those I never knew and my personal acquaintance with the rest, certain facts stand out.

First as to effectiveness as teachers, I can say that in the group were many excellent teachers and a few who were deficient in ability or will to teach effectively. The great majority became satisfactory teachers with experience.

The next factor that impresses me is the attitude of these men toward the institution of which they were a part. This feature runs the gamut from unselfish devotion to the school and to the students being trained to practice medicine, to extreme selfishness with endeavor to get as much as possible, tangible or intangible, and to give as little as possible in return. Fortunately the number in the latter group is small but that very fact makes this characteristic of those few the more prominent.

A tendency has long endured to charge that clinical teachers in medical colleges are primarily influenced by the fact that such connection gives them prestige in their practice and that therefore clinical teachers are fundamentally selfish. My experience and knowledge of teachers in this school does not confirm such a generalization. Unselfishness is characteristic among practicing physicians. The adoption of the policy in 1893 that clinical teachers in this school should receive no monetary compensation was certainly a voluntary act that exhibited great unselfishness. The large amount of service given

by practicing physicians, from professors to assistants in the dispensary, with no return except experience, is in the aggregate a tremendous contribution. Some of the most selfish men connected with the institution during the forty years of my official connection with the university were men in laboratory positions.

Another characteristic in the group of several hundred men who have been teachers in this medical school is the possession of that modesty that is the hallmark of greatness, or the lack of it which is the mark of lesser minds. Again this runs the gamut from a large group who were modest, to a small group that sought publicity and acclaim by every device. The seeking of publicity is essentially an evidence of conceit and the conceited man is usually far less capable than he imagines himself to be.

If the proper study of man is man, the characteristics of a large group with similar education and similar duties, such as the teachers in one institution over a long period of years, afford a concentrated field for such study.

A group other than the teachers merits mention: the graduates and, in earlier years, the non-graduates who received in this medical school the major part of their training for the practice of medicine, several thousand in all.

Many of them reached high estate in the medical profession, and contributed or are contributing not only directly to alleviation of human suffering but to new discoveries that have helped all physicians better to attack the ravages of disease. Many of them served in wars, where some of them died. Others went to far countries as medical missionaries to carry the benefits of American medicine to people whose native medical practice was based on little more than superstition. There they not only gave personal medical service but founded hospitals and medical schools and trained many native young men in a knowledge of medicine that permeated the entire country. This foreign service began in the earliest years of this medical school and has continued until the present day. The value of this foreign medical service received recognition in the earliest years of the institution, and for more than fifty years students who were

training to become medical missionaries were relieved of the payment of tuition. A list could be compiled of more than a hundred alumni who have rendered medical service on the shores of Asia, in the islands of the Pacific Ocean, and in the jungles of Africa.

The early participation of this medical school in the medical education of women has been described in an earlier chapter. The few women who attended in those early years had a deep influence on the practice of medicine by women.

The great majority of men trained in this medical school have practiced in the United States from the shores of the Atlantic Ocean to the border of the Pacific Ocean and from the Canadian border to the Gulf of Mexico. Graduates of this medical school have practiced medicine in every state and territory.

I have tried to arrive at a quantitative estimate of how much medical practice has been done and will have been done by those graduated in this school in its first hundred years. I have taken the average age at death of one thousand of its graduates as a sample. Knowing the average age at time of graduation and making allowance for retirement from practice by elderly men, I have found that on the average the graduates of this school have practiced for more than thirty years. With the assumption that the living graduates will also practice as long as thirty years, when the last graduate of 1943 shall have died, the aggregate number of years will be equivalent to the practice of one physician for 175,000 years. From the known number of days in a year and an estimated average of the number of patients seen each day, I have reached the estimate of more than half a billion medical treatments that will have been given by those graduated in this school in a hundred years.

The foregoing estimate concerns only those who have received the medical degree from this institution. Over 1800 additional men attended in the first half-century without remaining to receive a medical degree. At least two-thirds of them received no other institutional medical instruction. At least one thousand of these practiced medicine throughout their

lives. If the service of these were added, the total amount of estimated medical service based upon training in this medical school would be increased by twenty-five per cent.

The administrators, the teachers, the students, and the graduates are intimate participants in the work of the institution. Another group of men and women, fewer in number, must be considered great factors in the progress of the institution in its second half-century. These are the men and women who have contributed money to enlarge and support the activities of the medical school and of the associated hospitals and dispensaries, without which adequate training for the efficient practice of medicine is impossible.

The number of these contributors is several hundred, many of whom contributed repeatedly. Some have given from their small avails what in figures may appear minor sums but which represent no less a degree of generosity according to their means than the larger gifts that are better known.

To all these donors small and large, the medical school acknowledges its indebtedness and desires to express its gratitude. It would be impossible to mention all the known donors, and some are unknown, while some others have preferred to remain anonymous, among them one who gave at one time the sum of $300,000. Some of these gifts have been made while the donors were living; other gifts have been bequests at death, and yet others have been received from foundations established for educational and charitable purposes by individuals or small groups of individuals.

The great advance of medical knowledge and practice in a hundred years is well known to all. The advance of medical education is less well known in general or in detail. The two advances were closely interrelated in cause and effect.

If one compares the curriculum of this school in its first year with that of its hundredth year, he becomes more definitely aware of the advance. In the eighteen 'forties the student attended approximately thirty lectures each week for sixteen weeks, a total of 480 hours of instruction. In addition he made a hasty dissection, to which he devoted not more than twenty

hours, giving a total of 500 hours of instruction in the medical school. When the student returned to attend a second session before he received his medical degree, the instruction was only a repetition, a review of instruction already received.

The student of this school who was graduated at the end of its one hundredth year had attended approximately 5,000 hours of instruction under the teaching staff, and none of it was repetition. The amount of unrepeated instruction received in the medical school before graduation has therefore increased tenfold in a hundred years.

This is only one factor. The student of a hundred years ago was considered sufficiently prepared to enter a medical college if he had completed the work of a country district school or the grammar grades of a school in a town or city. Today the student before beginning medical study must have completed the four years of a high school or other preparatory school and at least three years of a college of arts or science. In all, seven more years of study have increased his capability to understand the instruction given in the medical curriculum. The entering medical student of today has an ability to receive instruction that is at least twice that of the student of a hundred years ago.

Another factor is the methods of instruction. A hundred years ago the participation of the student was almost entirely in the rôle of a listener to lectures. Now the larger part of his participation is as a doer, in laboratories, in dispensaries, and in hospital wards.

These changes are not capable of exact mathematical comparison, but the medical graduate of 1943 has a training at least twenty-five times better and greater than that given by medical colleges of 1843. Advance of medical education has been universal, and the School of Medicine of Western Reserve University has been one of the leaders in promoting that advance.

The medical college of a hundred years ago made no pretense of fostering the advance of medical knowledge. Today this medical school is a center not only for efficient training of men and women to practice medicine, but also for the discovery of new facts and relations that are freely given to the entire pro-

fession and enable every physician to attack disease with greater success.

The difference of facilities for instruction is striking. A few rudely furnished rented rooms in a business block, with no laboratories and no teaching equipment except that belonging personally to the teachers, constituted the means of teaching in the first year. In the hundredth year the teaching was carried on in a building larger than any building in the city of Cleveland in 1843, a building equipped with extensive laboratories, service rooms, and libraries, and with movable equipment valued at several hundred thousand dollars.

The only source of patients for teaching in 1843 was a small almshouse harboring twenty-five elderly persons with chronic diseases. Today hospitals with nearly 3,000 beds and dispensaries with patients ranging from the new-born to persons in old age afford examples of every disease found in this region and permit the demonstration to students of nearly every disease and condition with which they are likely to come in contact during their future years of private service.

All of these advances in this institution in a hundred years constitute an epitome of the advance of medical knowledge and medical practice that has been developed through the cooperation of members of the medical profession, of workers in all branches of science, and with continuing support of the laity.

This medical school has developed from a pioneer effort of a few men devoting their lives to human welfare to a position of leadership in medical education and research.

Looking Forward

A prophet is not without honor except in his own country. Therefore I shall make no attempt to predict the unknown future of this institution except to say that it has a firm basis in the history of a hundred years this volume has attempted to describe. The future is in the lap of the gods, and may they, in appreciation of what has been done in the past, look with favor upon the School of Medicine of Western Reserve University in the second century of its service.

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APPENDICES

APPENDIX A: AMERICAN MEDICAL TEACHING ORGANIZATIONS PRIOR TO NOVEMBER 1, 1843

Thirteen of these organizations were extinct before 1843 and three others were in suspension in that year, leaving thirty-eight in operation. Eighteen of these have since become extinct, so that in 1943 there were twenty medical schools older than the School of Medicine of Western Reserve University.

The first date is the year of beginning of medical instruction. Absence of a terminal date indicates that the institution or its legal successor was active in 1943.

The terminal name in parentheses is either the name at time of extinction or the present name. Intermediate names and secondary names are omitted. An asterisk follows the names of the eight institutions that taught cult or sectarian medicine.

In eight early institutions the medical professors at the outset were members of the common faculty of arts. The medical teaching cannot be properly designated otherwise than as professorships until a separate faculty of medicine was organized under a dean. This was not accomplished in the first four in the list before extinction came. These essentials were acquired at Columbia College in 1791, at Harvard College in 1816, at Transylvania University in 1817, and at Dartmouth College in 1836. From these several years, but not before, the designation of medical college, department, or school can properly be applied.

1765–1791	Medical Professorships of the College of Philadelphia
1767–1774	Medical Professorships of King's College
1779–1783	Medical Professorship of the College of William and Mary
1779–1791	Medical Professorships of the University of the State of Pennsylvania
1783–	Medical Professorships of Harvard College (Harvard Medical School)
1784–1813	Medical Professorships of Columbia College (Medical Department of Columbia College)
1791–	Medical Department of the University of Pennsylvania (University of Pennsylvania School of Medicine)
1792–1827	The New Institution, Medical Faculty of Queen's College (Medical Department of Rutgers College)
1797–	Medical Professorship of Dartmouth College (Dartmouth Medical School)
1799–1855	Medical Professorships of Transylvania University (Medical Department of Transylvania University)
1807–	College of Physicians and Surgeons of New York City (Columbia University College of Physicians and Surgeons)
1807–	Medical College of Maryland (University of Maryland School of Medicine and College of Physicians and Surgeons)

1811–1828 Medical Department of Brown University
1812–1841 College of Physicians and Surgeons of the Western District of New York
1812– Medical Institution of Yale College (Yale University School of Medicine)
1818–1861 Castleton Medical Academy (Castleton Medical College)
1819– Medical College of Ohio (University of Cincinnati College of Medicine)
1820–1921 Medical Department of Bowdoin College
1822– Medical Department of the University of Vermont (University of Vermont College of Medicine), in suspension in 1843
1823–1867 Berkshire Medical Institution (Berkshire Medical College)
1823–1838 Medical College of South Carolina
1825– Medical Department of Jefferson College (Jefferson Medical College)
1825– Medical Department of Columbian College (George Washington University School of Medicine)
1826–1861 Medical College of the Valley of Virginia, in suspension in 1843
1826–1861 Winchester (Virginia) Medical College, in suspension in 1843
1826–1829 Reformed Medical College of New York City,* never chartered
1827–1856 Clinical School of Medicine (Vermont Medical College), at Woodstock
1827–1877 Medical Department of Washington College (Washington University School of Medicine), at Baltimore
1828– Medical Department of University of Virginia
1828– Medical Academy of Georgia (University of Georgia School of Medicine)
1830–1840 Reformed Medical College, Medical Department of Worthington College*
1831–1833 New York School of Medicine
1832– Medical College of the State of South Carolina
1833–1834 Medical Department of Indiana University, doubtful if instruction was organized
1834– Medical College of Louisiana (Tulane University of Louisiana School of Medicine)
1834–1846 Cincinnati Medical College
1834–1848 Lake Erie Medical College Medical Department of Willoughby University (Willoughby Medical College)
1835–1841 North American Academy of the Homeopathic Healing Art*
1835– Medical Department of Geneva College (Syracuse University College of Medicine)
1836–1880 Physio-Medical College of Ohio*
1836–1846 Botanic College of Medicine of New York City*
1836–1850 Botanico-Medical Institute of Ohio (Botanico-Medical College of Ohio)*

1837–	Louisville Medical Institute (University of Louisville School of Medicine)
1838–	Albany Medical College
1838–	Medical Department of Hampden-Sydney College (Medical College of Virginia)
1839–1884	Southern Botanico-Medical College (College of American Medicine and Surgery)*
1839–1857	American Medical College*
1839–1861	Medical Department of Pennsylvania College (Pennsylvania Medical College)
1840–1899	Medical Department of Kemper College (Missouri Medical College)
1840–1855	Prince Edward Medical Institute (Medical Department of Randolph-Macon College)
1841–	Medical Department of the University of the City of New York (New York University College of Medicine)
1842–	Medical Department of St. Louis University (Washington University School of Medicine)
1842–1851	Medical Department of La Porte (Indiana) University
1842–1845	Medical Department of the University of St. Charles (Illinois)

APPENDIX B: TEACHING STAFF

Medical Department of Western Reserve College (1843-1881)
Medical Department of Western Reserve University (1881-1912)
School of Medicine of Western Reserve University since 1912

This extensive appendix contains the names and academic records of 521 teachers who were appointed before November 1, 1943 in grades of professor to instructor inclusive. The list includes ninety-seven professors, one extraordinary professor, forty-five associate professors, one hundred assistant professors, fourteen lecturers, twenty-three associates, eighty-five senior instructors, and 156 instructors. All of these are included in the index.

The names of 402 demonstrators who have not reached a higher grade, and the names of eighty-five persons who did not progress beyond the grade of teaching clinical assistant—used from 1887 to 1916—are not listed. The names of student assistants and of teaching fellows are omitted.

The appendix is divided into ten sections, each designated by a specific grade and title. The name of a person appears only once and is placed in the section of the highest grade he reached prior to November 1, 1943.

The arrangement in each section is chronological in the order of reaching that grade. When multiple appointments were made to the same grade in the same year, the several names are arranged alphabetically.

The dates preceding each name indicate the academic years of occupancy of the grade in which the name is listed, not the total number of years of teaching service in all grades. Absence of a terminal date shows that the person is still a member of the teaching staff.

The record of each person includes degrees, teaching positions held in other institutions above secondary schools before joining the teaching staff of this medical school, and the several grades occupied in this school. Teaching positions occupied since leaving the teaching staff of this medical school are not included. Coincident titles in the School of Dentistry and in the Graduate School of Western Reserve University are not included. Vital statistics are given only for professors and associate professors. Absence of date of death indicates the individual is living, unless some other explanation is given. All towns and cities are in Ohio unless otherwise stated. The following abbreviations are used for local medical schools: WRC for Medical Department of Western Reserve College before 1881, WRU for Medical Department or School of Medicine of Western Reserve University since 1881, CHMC for Charity Hospital Medical College, WU for Medical Department of University of Wooster, and OWU for Medical Department of Ohio Wesleyan University.

a. Professors

1843-56 Horace A. Ackley, M.D., of unknown source prior to 1836; M.D. (Hon.), Medical Department of Illinois Coll. (Jacksonville), 1845; b. Genesee Co., N.Y., 1810; Professor of Anatomy and Physiology, Willoughby Medical Coll., 1835-43; Professor of Anatomy, Physiology, and

Surgery, WRC, 1843-44; of Principles and Practice of Surgery, 1844-56; President, Ohio State Medical Society, 1852; d. Cleveland, 4-24-1859.

1843-73 John Lang Cassels, M.D., Coll. of Physicians and Surgeons, Western District of New York (Fairfield), 1834; LL.D., Jefferson Coll. (Mississippi), 1859; b. Stirling, Scotland, 10-15-1808; Demonstrator in Anatomy, Coll. of Physicians and Surgeons, Western District of New York, 1832-35; Professor of Midwifery and Diseases of Women and Children, Willoughby Medical Coll., 1835-36; of Chemistry, 1836-43; Dean, 1836-43; Professor of Chemistry, Materia Medica, and Pharmacy, WRC, 1843-44; of Materia Medica, Pharmacy, and Botany, 1844-56; of Chemistry and Botany, 1856-61; of Chemistry and Toxicology, 1861-73; Dean, 1843-44, 1861-73; Emeritus Professor, 1873-79; d. Cleveland, 6-11-1879.

1843-61 John Delamater, M.D. (Hon.), Berkshire Medical Institution, Medical Department of Williams Coll., 1824; LL.D., Western Reserve Coll., 1860; b. Chatham, N.Y., 4-18-1787; Professor of Pharmacy and Materia Medica, Berkshire Medical Institution, 1823-26; and of Obstetrics, 1826-27; Professor of Surgery, Coll. of Physicians and Surgeons, Western District of New York (Fairfield), 1827-36; of Practice of Physic and Diseases of Women and Children, 1836-39; of Physic and Midwifery, 1839-40; Lecturer in Theory and Practice of Physic, Bowdoin Medical Coll., 1829-30; Professor, 1830-34; Lecturer, 1840-41; Professor of Theory and Practice of Physic, Dartmouth Medical Coll., 1836-38; of Materia Medica, Obstetrics, Diseases of Women and Children, 1838-40; Professor of Surgery, Medical Coll. of Ohio, 1838-39; Professor of Theory and Practice of Physic, Willoughby Medical Coll., 1838-41; of Materia Medica, General Pathology, and Obstetrics, 1841-43; Professor of Materia Medica and Pathology, Geneva Medical Coll., 1840-43; Professor of Surgery, Franklin Medical Coll. (St. Charles, Ill.), 1842-43; Professor of Midwifery, Diseases of Women and Children, WRC, 1843-47; of General Pathology, Midwifery, Diseases of Women and Children, 1847-56; of Midwifery, Diseases of Women and Children, 1856-61; Dean, 1844-46, 1846-61; Emeritus Professor, 1861-67; d. Cleveland, 3-28-1867.

1843-64 Jared Potter Kirtland, M.D., Yale Medical Institution, 1815; LL.D., Williams Coll., 1861; b. Wallingford, Conn., 11-10-1793; Professor of Theory and Practice of Physic, Medical Coll. of Ohio, 1837-42; Professor of Theory and Practice of Physic and Physical Signs of Disease, Willoughby Medical Coll., 1842-43; Professor of Theory and Practice of Physic, WRC, 1843-47; of Theory and Practice of Physic and Physical Diagnosis, 1847-56; of Principles and Practice of Medicine, 1856-64; Dean, 1846 (for six months); Emeritus Professor, 1864-77; President Ohio State Medical Society, 1847; d. Rockport (Cleveland), 12-10-1877.

1843-47 Noah Worcester, A.B., Harvard Coll., 1832; M.D. Dartmouth Medical Coll., 1838; b. Thorton, N.H., 7-29-1812; Demonstrator in Anatomy, Dartmouth Medical Coll., 1837-38; Professor of Physical Diagnosis and Pathological Anatomy, Medical Coll. of Ohio, 1842-43; Pro-

fessor of General Pathology and Physical Diagnosis, WRC, 1843-47; d. Cincinnati, 4-7-1847.

1844-56 Samuel St. John, A.B., Yale Coll., 1834; A.M., 1837; M.D.(Hon.), Vermont Medical Coll. (Woodstock), 1840; LL.D., Georgetown Coll. (Kentucky), 1849; M.D. (Hon.), College of Physicians and Surgeons, New York City, 1857; b. New Canaan, Conn., 3-29-1813; Tutor, Yale Coll., 1836-37; Professor of Chemistry, Mineralogy and Geology, Western Reserve Coll., 1838-52; Lecturer in Medical Jurisprudence, WRC, 1843-44; Professor of Chemistry and Medical Jurisprudence, 1844-56; d. New Canaan, Conn., 9-9-1876.

1846-61 Jacob John Delamater, M.D., New York Univ., 1844; A.M.(Hon.), Western Reserve Coll., 1851; A.M. (Hon.), Illinois Coll. (Jacksonville), 1853; b. Albany, N.Y., 6-25-1815; Lecturer in Anatomy and Physiology, WRC, 1844-46; Professor of Anatomy and Physiology, 1846-56; of Materia Medica, Therapeutics, and Medical Jurisprudence, 1856-61; d. Washington, D.C., 9-25-1886 (1880?).

1856-90 Proctor Thayer, M.D., WRC, 1849; b. Williamstown, Mass., 10-16-1823; Demonstrator in Anatomy, WRC, 1853-56; Professor of Anatomy and Physiology, 1856-63; of Surgery and Anatomy, 1863-64; of Science and Art of Surgery, 1864-73; of Principals and Practice of Surgery and Medical Jurisprudence, 1873-90; of Medical Jurisprudence and Emeritus Professor of Surgery, 1890; d. Cleveland, 10-1-1890.

1856-63, 1881-93 Gustav Carl Erich Weber, M.D., St. Louis Medical Coll., 1851; LL.D., Univ. of Wooster, 1877; b. Bonn, Prussia, 5-26-1828; Professor of Principles and Practice of Surgery, WRC, 1856-63; Professor of Clinical Surgery and Dean, CHMC and WU, 1864-81; Professor of Clinical Surgery, WRU, 1881-93; Dean, 1883-93; Trustee of Western Reserve Univ., 1884-93; d. Willoughby, 3-21-1912.

1861-65, 1878-83 Henry Kirke Cushing, A.B., Union Coll., 1848; M.D., Univ. of Pennsylvania, 1851; LL.D., Western Reserve Univ., 1884; b. Lanesboro, Mass., 7-27-1827; Adjunct Professor of Midwifery and Diseases of Women and Children, WRC, 1856-61; Professor of Midwifery, Diseases of Women and Children, and Medical Jurisprudence, 1861-63; of Obstetrics and Surgery, 1863-65; of Gynecology and Emeritus Professor of Obstetrics, 1878-83; Emeritus Professor of Gynecology, 1883-89; Trustee of Western Reserve Univ., 1888-1901; d. Cleveland, 2-12-1910.

1861-65 Alleyne Maynard, M.D., Univ. of Edinburgh (date not found); b. Barbados, West Indies, 1820; Professor of Materia Medica, Therapeutics and Physical Diagnosis, WRC, 1861-62; of Materia Medica and Physical Diagnosis, 1862-65; d. Cleveland, 9-13-1890.

1863-67 David H. Scott, A.B., Jefferson Coll., 1853; M.D., WRC, 1855; b. Hayesville, 10-20-1828; Professor of Physiology and Diseases of Children, WRC, 1863-64; of Principles and Practice of Medicine, 1864-67; d. Chillicothe, 2-25-1905.

1864-65, 1871-95 Isaac Newton Himes, A.B., Jefferson Coll., 1853; M.D., Coll. of Physicians and Surgeons, New York City, 1856; b. Shippens-

burg, Pa., 12-4-1834; Professor of Anatomy and Physiology, WRC, 1864-65; Lecturer in Physiology and Histology, 1870-71; Professor of Physiology and Histology, 1871-72; of Physiology, Physiological and Pathological Histology, 1872-81; of Morbid Anatomy and Orthopedic Surgery, 1881-83; of Pathological Anatomy, 1883-84; of Pathology, 1884-92; of Pathology and Pathological Anatomy, 1892-93; of Pathology and Pathological Anatomy and Bacteriology, 1893-95; Dean, 1893-95; d. Cleveland, 4-1-1895.

1864-65 Dudley Allen, A.B., Western Reserve Coll., 1832; M.D., Jefferson Medical Coll., 1837; b. Kinsman, 6-27-1814; Professor of Materia Medica, WRC, 1864-65; d. Oberlin, 4-11-1898.

1865-72 John Johnson Elwell, M.D., WRC, 1846; LL.B. (institution not found); b. Warren, 2-18-1831; Professor of Medical Jurisprudence, WRC, 1865-72; Professor of Medical Jurisprudence, Ohio State and Union Law Sch. (Cleveland), 1867-71; d. Cleveland, 3-13-1900.

1865-67 Azariah Everett, M.D., Jefferson Medical Coll., 1846; b. Liberty, 11-24-1821; Professor of Ophthalmic Medicine and Surgery, WRC, 1865-67; d. Cleveland, 6-17-1898.

1865-66 John C. Ferguson, A.B., Union Coll., 1851; M.D., WRC, 1863; b. Fort Covington, N.Y., 1-1-1828; Professor of Physiology, WRC, 1865-66; d. Cleveland, 8-3-1869.

1865-66 Ephriam Lynch King, M.D., WRC, 1861; b. Perryopolis, Pa., 2-17-1830; Professor of Materia Medica and Physical Diagnosis, WRC, 1865-66; d. Tampa, Fla., 3-10-1886.

1865-96 Jacob Laisy, A.B., Western Reserve Coll., 1850; M.D., WRC, 1853; b. Friedelsheim, Bavaria, 2-15-1824; Demonstrator in Anatomy, WRC, 1863-65; Professor of Anatomy, 1865-73; of Osteology, 1873-79; of Anatomy, 1879-81; of Osteology, 1881-87; of Practical Anatomy, 1887-96; Emeritus Professor, 1896-1903; d. Syracuse, Neb., 2-25-1903.

1865-72 Charles Augustus Terry, M.D., Coll. of Physicians and Surgeons, New York City, 1833; b. Hartford, Conn., 10-9-1810; Professor of Obstetrics and Diseases of Women and Children, WRC, 1865-72; d. Cleveland, 2-5-1872.

1866-92 John Bennitt, M.D., WRC, 1850; b. Putney, N.Y., 3-24-1830; Professor of Physiology and Histology, WRC, 1866-67; of Principles and Practice of Medicine, 1867-92; Dean, 1873-81; d. Youngstown, 5-21-1892.

1867-1905 John Eaton Darby, A.B., Williams Coll., 1858; A.M., 1861; M.D., WRC, 1861; b. South Williamstown, Mass., 8-20-1834; Professor of Greek and Latin, Cleveland Institute, 1858-60; Demonstrator in Anatomy, WRC, 1861-62; Professor of Materia Medica and Pharmacy, 1867-73; of Materia Medica and Therapeutics, 1873-1901; of Therapeutics, 1901-05; Emeritus Professor, 1905-18; d. Cleveland, 1-4-1918.

1867-71 Joseph Thatcher Woods, M.D., Univ. of Michigan, 1855; b. Columbiana, 3-6-1828; Professor of Physiology and Histology, WRC, 1867-71; Lecturer in Genito-Urinary Surgery, 1871-72; d. Washington, D.C., 8-5-1911.

1867-69 Milton Case Woodworth, M.D., Univ. of Michigan, 1857; b. Cazenovia, N.Y., 10-28-32; Demonstrator in Operative Surgery, WRC, 1865-66; Professor of Ophthalmic Medicine, 1867-69; d. Ellsworth, Wis., 1-30-1897.

1872-81 Xenephon Christmas Scott, A.B., Jefferson Coll., 1865; M.D., WRC, 1867; M.D., Coll. of Physicians and Surgeons, New York City, 1869; b. Hayesville, 12-4-1843; Lecturer in Ophthalmology and Otology, WRC, 1871-72; Professor of Ophthalmology, Otology and Laryngology, 1872-81; President, Ohio State Medical Society, 1894; d. Cleveland, 9-30-1909.

1872-78 Frank Wells, A.B., Harvard Coll., 1864; M.D., Harvard Medical Sch., 1868; Master of Obstetrics, Univ. of Vienna, 1869; b. Boston, Mass., 10-11-1842; Adjunct Professor of Obstetrics and Diseases of Women and Children, WRC, 1871-72; Professor 1872-78; d. Boston, Mass., 3-4-1919.

1873-79 Benjamin Whitley Holliday, M.D., WRC, 1869; A.B. (Hon.), Western Reserve Coll., 1876; b. East Springfield, Pa., 5-21-1847; Lecturer in Diseases of Urinary Organs, WRC, 1872-73; Professor of Anatomy, 1873-79; d. Cleveland, 2-18-1914.

1873-88 Edward Williams Morley, A.B., Williams Coll., 1860; A.M., 1863; Grad., Andover Theological Seminary, 1864; M.D. (Hon.), WRC, 1877; Ph.D. (Hon.), Univ. of Wooster, 1878; LL.D., Western Reserve Univ., 1891; Williams Coll., 1901; Lafayette Coll., 1907; Univ. of Pennsylvania, 1915; D.Sc. (Hon.), Yale Univ., 1909; b. Newark, N.J., 1-29-1838; Professor of Chemistry and Natural History, Western Reserve Coll. and Adelbert Coll., 1869-1906; Emeritus Professor, 1906-23; Professor of Chemistry and Toxicology, WRC, 1873-81; of Chemistry, 1881-88; d. West Hartford, Conn., 2-24-1923.

1875-81 Lewis Buffett, D.D.S., Pennsylvania Coll. of Dental Surgery, 1863; M.D., WRC, 1865; b. Schaghitcoke, N.Y., 5-21-1837; Lecturer on Oral Pathology, 1874-75; Professor of Oral Surgery and Dental Pathology, 1875-81; d. Easton, Md., 1-27-1901.

1875-1907 Hunter Holmes Powell, M.D., Medical Coll. of Virginia, 1867; A.M. (Hon.), Western Reserve Univ., 1894; b. Middleburg, Va., 12-16-1843; Lecturer in Diseases of Children, WRC, 1874-75; Professor of Diseases of Children, 1875-78; of Obstetrics and Diseases of Children, 1878-1907; Emeritus Professor, 1907-15; Dean, 1895-1900; d. Cleveland, 1-9-1915.

1881-92 Henry Justus Herrick, A.B., Williams Coll., 1858; M.D., Rush Medical Coll., 1861; A.M. (Hon.), Western Reserve Coll., 1867; b. Twinsburg, 1-20-1833; Professor of Obstetrics and Diseases of Women and Children, CHMC, 1865-69; of Principles and Practice of Surgery, CHMC and WU, 1869-81; Professor of Pathology, State Medicine and Hygiene, WRU, 1881-83; of Gynecology, State Medicine and Hygiene, 1883-85; of State Medicine and Hygiene, 1885-92; Emeritus Professor, 1892-1901; President Ohio State Medical Society, 1874; d. Cleveland, 1-28-1901.

1881-93 Henry William Kitchen, M.D., WU, 1871; b. Massillon, 7-8-1844; Demonstrator in Anatomy, WU, 1871-72, Lecturer, 1872-76; Professor, 1876-81; Professor of Anatomy, WRU, 1881-93; d. Cleveland, 9-30-1907.

1881-1919 John Henry Lowman, A.B., Wesleyan Univ., 1871; M.D., WU, 1873; M.D., Coll. of Physicians and Surgeons, New York City, 1876; b. Cleveland, 10-6-1849; Lecturer in Materia Medica and Therapeutics, WU, 1875-76; Professor, 1876-81; Professor of Materia Medica and Therapeutics, WRU, 1881-89; of Internal Medicine, 1889-93; of Medicine and Clinical Medicine, 1893-1909; of Clinical Medicine, 1909-12; of Clinical Medicine, and Medical Ethics, 1912-19; d. New York City, 1-23-1919.

1881-83 Theodore Clarke Miller, M.D., CHMC, 1867; b. Butler Co., Pa., 7-17-1842; Assistant in Clinical Medicine, WU, 1870-71; Lecturer in Diseases of Urinary Organs, WRC, 1872-73; Lecturer in Obstetrics, WU, 1873-74; Professor of Materia Medica and Therapeutics, 1874-75; of Obstetrics, 1875-81; Professor of Obstetrics and Diseases of Children, WRU, 1881-83; d. Massillon, 1-21-1923.

1881-93 Charles Barnsdall Parker, A.B., Univ. of Rochester, 1874; M.D., WU, 1877; M.R.C.S., London, 1880; A.M. (Hon.), Ohio Wesleyan Univ., 1910; M.S., 1911; b. New York City, 11-23-1852; Demonstrator in Anatomy, WU, 1877-78; Lecturer in Physiology, 1879-81; Professor of Physiology, WRU, 1881-86; of Physiology and Lecturer in Gynecology, 1886-88; Professor of Physiology and Gynecology, 1888-90; of Surgery and Gynecology, 1890-92; of Surgery, 1892-93; Professor of Surgery, WU and OWU, 1893-1910; Dean, 1896-1901; Associate Professor of Surgery, WRU, 1910-13; Emeritus Professor, 1913-18; d. Cleveland, 9-18-1918.

1881-92 William Johnston Scott, A.B., Kenyon Coll., 1848; LL.D., 1889; M.D., Starling Medical Coll., 1855; b. Culpepper Co., Va., 1-25-1823; Professor of Chemistry and Geology, Jefferson Coll. (Washington, Miss.), 1851-52; Professor of Materia Medica and Pharmacy, CHMC, 1864-66; of Clinical Medicine, 1866-70; of Principles and Practice of Medicine, WU, 1870-81; Professor of Medicine, WRU, 1881-92; Emeritus Professor, 1892-96; Dean, 1881-83; President, Ohio State Medical Society, 1876; d. Cleveland, 5-5-1896.

1881-93 Daniel Buttrick Smith, A.B., Oberlin Coll., 1860; A.M., 1863; M.D., CHMC, 1867; b. Middleburg, 4-20-1840; Lecturer in Physiology, WU, 1873-74; Professor, 1874-75; of Diseases of Eye and Ear, 1875-81; Professor of Diseases of Eye and Ear, WRU, 1881-93; d. Cleveland, 5-19-1922.

1892-1903 Perry Lynes Hobbs, B.S., Case School of Applied Science, 1886; Ph.D., Univ. of Berlin, 1889; b. Cleveland, 9-10-1861; Lecturer in Chemistry, WRU, 1889-90; Acting Professor, 1890-92; Professor, 1892-1903; d. Cleveland, 4-6-1912.

1892-1900 Conway Whittier Noble, A.B., Univ. of Michigan, 1863; LL.B., Ohio State and Union Law School (Cleveland), 1865; b. Monroe, Mich., 10-7-1842; Professor of Medical Jurisprudence, CHMC and WU, 1867-81; Professor of Medical Jurisprudence, WRU, 1892-1900; d. Cleveland, 12-5-1910.

1892-1932 John Pascal Sawyer, A.B., Adelbert Coll., 1883; A.M., 1886; M.D., WRU, 1886; HH.D., 1939; Instructor in Physiology WRU, 1888-89; Lecturer, 1889-90; Acting Professor, 1890-92; Professor of Physiology, 1892-93; of Medicine and Clinical Medicine, 1893-1909; of Clinical Medicine, 1909-14; of Therapeutics and Clinical Medicine, 1914-32; Emeritus Professor, 1932-45; d. Cleveland, 6-17-1945.

1893-1910 Dudley Peter Allen, A.B., Oberlin Coll., 1875; A.M., 1878; LL.D., 1908; M.D., Harvard Medical Sch., 1880; b. Kinsman, 3-25-1852; Lecturer in Anatomy (on leave) WRC, 1880-81; Lecturer in Minor Surgery and Orthopedics, WRU, 1883-84; in Minor Surgery, 1884-89; Professor of Theory and Practice of Surgery, 1893-1910; Emeritus Professor, 1910-13; President, Ohio State Medical Society, 1892; d. Cleveland, 1-6-1913.

1893-1912 George Coates Ashmun, M.D., WRC, 1873; b. Tallmadge, 1-31-1841; Assistant Lecturer in Medicine, WU, 1879-81; Lecturer in State Medicine and Hygiene, 1885-86; Professor, 1886-92; of Hygiene, State Medicine and Diseases Children, 1892-93; Lecturer in Hygiene, Case School of Applied Science, 1903-07; Professor of Hygiene and State Medicine, WRU, 1893-94; of Hygiene and Preventive Medicine, 1894-1909; of Medical Jurisprudence and Ethics, 1909-12; Emeritus Professor, 1912-29; d. Cleveland, 6-25-1929.

1893-93 Guy Buttles Case, A.B., Hobart Coll., 1871; A.M., 1879; A.M. (Hon.), Kenyon Coll., 1897; M.D., WU, 1873; b. Cleveland, 8-?-1849; Lecturer in Genito-Urinary Diseases, WRU, 1888-89; in Venereal Diseases, 1889-90; Acting Professor of Genito-Urinary and Venereal Diseases, 1890-93; Professor, 1893-93; d. Cleveland, 2-26-1904.

1893-1914 William Thomas Corlett, M.D., WU, 1877; L.R.C.P., London, 1881; HH.D., Western Reserve Univ., 1943; b. Orange, 4-15-1854; Demonstrator in Anatomy, WU, 1878-79; Lecturer in Dermatology and Genito-Urinary Diseases, 1882-83; Professor, 1883-86; Assistant in Dermatology, WRU, 1887-88; Lecturer, 1888-90; Acting Professor, 1890-93; Professor of Dermatology, Syphilology, and Genito-Urinary Diseases, 1893-1901; of Dermatology and Syphilology, 1901-14; Emeritus Professor, 1914-

1893-94 Johannes Wilhelm Gad, M.D., Univ. of Berlin, 1874; b. Posen, Germany, 6-30-1842; Extraordinary Professor and Director of Physiological Institute, Univ. of Berlin, 1885-93; Professor of Physiology, WRU, 1893-94; d. Prague, Bohemia, 2-1-1926.

1893-1912 Benjamin Love Millikin, A.B., Allegheny, Coll., 1874; A.M., 1877; M.D., Univ. of Pennsylvania, 1879; b. Gustavus, 12-24-1851; Assistant in Ophthalmology, WRU, 1883-93; Professor of Ophthalmology, 1893-1912; Emeritus Professor, 1912-16; Dean, 1900-12; d. Cleveland, 1-6-1916.

1893-94 Christian Sihler, Grad. Concordia Coll. (Indiana), 1866; M.D., Univ. Michigan, 1871; Ph.D., Johns Hopkins Univ., 1881; b. Ft. Wayne, Ind., 10-2-1848; Demonstrator in Histology, WRU, 1887-88; Instructor in Histology and Microscopy, 1888-90; Acting Professor, 1890-93; Profes-

sor, 1893-94; Associate Professor of Physiology, WU, 1894-96; Lecturer in Hydropathy, WRU, 1907-10; d. Cleveland, 8-22-1919.

1893-1912 Henry Swift Upson, A.B., Western Reserve Coll., 1880; M.D., Coll. of Physicians and Surgeons, New York City, 1884; b. Akron, 12-22-1859; Assistant in Nervous Diseases, WRU, 1887-92; Extraordinary Professor, 1892-93; Professor, 1893-1912; Emeritus Professor, 1912-13; d. Rome, Italy, 4-23-1913.

1894-1928 Frank Emory Bunts, Grad. U.S. Naval Academy, 1881; M.D., WRU, 1886; b. Youngstown, 6-3-1861; Lecturer in Minor Surgery, WU, 1887-89; Professor of Minor Surgery, 1889-90; of Principles of Surgery, 1890-94; Professor of Principles of Surgery and Clinical Surgery, WRU, 1894-1928; Emeritus Professor, 1928; d. Cleveland, 11-28-1928.

1894-1930 Carl August Hamann, M.D., Univ. of Pennsylvania, 1890; b. Davenport, Iowa, 1-26-1868; Assistant Demonstrator in Anatomy, Univ. of Pennsylvania, 1891-93; Acting Professor of Anatomy, WRU, 1893-94; Professor of Anatomy, 1894-1911; of Applied Anatomy and Clinical Surgery, 1911-30; Dean, 1912-28; d. Cleveland, 1-12-1930.

1894-1914 Hunter Robb, M.D., Univ. of Pennsylvania, 1884; b. Burlington, N.J., 9-30-1863; Associate in Gynecology, Johns Hopkins Univ., 1891-94; Professor of Gynecology, WRU, 1894-1914; d. Burlington, N.J., 5-15-1940.

1894-1903, 1907-30 George Neil Stewart, A.M., Univ. of Edinburgh, 1882; B.S., 1886; M.B., C.M., 1889; M.D., 1891; LL.D., 1920; D.P.H., Univ. of Cambridge, 1890; b. London, Ontario, 4-18-1860; Demonstrator in Physiology, Owens College (Manchester, England), 1887-89; Instructor in Physiology, Harvard Medical Sch., 1893-94; Professor of Physiology, WRU, 1894-96; of Physiology and Histology, 1896-1901; of Physiology, 1901-03; Professor of Physiology, Univ. of Chicago, 1903-07; Professor of Experimental Medicine, WRU, 1907-30; d. Cleveland, 5-28-1930.

1895-1914 William Travis Howard, Jr., M.D., Univ. of Maryland, 1889; b. Statesburg, S.C., 3-13-1867; Instructor in Pathology and Bacteriology, Coll. of Physicians and Surgeons, Baltimore, 1891-94; Assistant in Pathology, Johns Hopkins Univ., 1891-94; Associate Professor of Pathology, WRU, 1894-95; Professor of Pathology, Pathological Anatomy, and Bacteriology, 1895-1914.

1896-1911 Edward Fitch Cushing, Ph.B., Cornell Univ., 1883; M.D., Harvard Medical Sch., 1888; b. Cleveland, 6-24-1862; Lecturer in Pediatrics, WRU, 1893-95; Assistant Professor, 1895-96; Professor, 1896-1911; d. Cleveland, 3-23-1911.

1896-1927 Charles Franklin Hoover, A.B., Harvard Coll., 1887; M.D., Harvard Medical Sch., 1892; b. Miamisburg, 8-2-1865; Assistant in Medicine, WRU, 1894-95; Lecturer in Physical Diagnosis, 1895-96; Professor of Physical Diagnosis, 1896-1909; of Medicine, 1909-27; d. Cleveland, 6-15-1927.

1900-24 George Washington Crile, A.B., Ohio Northern Univ., 1884;

A.M., 1888; M.D., WU, 1887; A.M., Univ. of Wooster, 1894; Ph.D. (Hon.), Hiram Coll., 1901; LL.D., College of Wooster, 1916; M.Ch., Univ. of Dublin, 1925; LL.D., Univ. of Glasgow, 1928; b. Chili (Ohio), 11-11-1864; Lecturer in Histology and Minor Surgery, WU, 1889-90; in Physiology, Histology, and Minor Surgery, 1890-91; Professor of Physiology and Histology, 1891-93; of Physiology and Principles of Surgery, 1896-98; of Principles of Surgery and Applied Anatomy, 1898-1900; Clinical Professor of Surgery, WRU, 1900-10; Professor of Surgery, 1910-24; Emeritus Professor, 1924-43; d. Cleveland, 1-7-1943.

1903-18 John James Richard Macleod, M.B., Ch.B., Univ. of Aberdeen, 1898; LL.D., 1928; D.P.H., Cambridge Univ., 1902; D.Sc., Univ. of Toronto, 1923; Jefferson Medical Coll., 1923; Univ. of Pennsylvania, 1928; Western Reserve Univ., 1928; b. Dunkeld, Scotland, 9-6-1876; Demonstrator in Physiology, London Hospital Medical Coll., 1900-01; Lecturer in Biochemistry, 1902-03; Professor of Physiology, WRU, 1903-18; d. Aberdeen, Scotland, 3-16-1935.

1904-44 Torald Hermann Sollmann, M.D., WRU, 1896; LL.D., 1943; D.Sc. (Hon.), Ohio State Univ., 1934; b. Coburg, Germany, 2-10-1874; Demonstrator in Physiology and Histology, WRU, 1896-98; Lecturer in Pharmacology and Demonstrator in Physiology, 1898-99; Lecturer in Pharmacology, 1899-1901; Assistant Professor of Pharmacology and Materia Medica, 1901-03; Associate Professor 1903-04; Professor, 1904-44; Dean, 1928-44; Emeritus Professor, 1944-

1906-40 Frederick Clayton Waite, B.Litt., Adelbert Coll., 1892; A.M., Western Reserve Univ., 1894; HH.D., 1943; A.M., Harvard Univ., 1896; Ph.D., 1898; b. Hudson, 5-24-1870; Assistant in Biology, Adelbert Coll., 1892-95; Instructor in Biology, New York Univ., 1899-1900; Assistant in Anatomy, Rush Medical Coll., 1900-01; Assistant Professor of Histology and Embryology, WRU, 1901-04; Associate Professor, 1904-06; Professor, 1906-40; Emeritus Professor, 1940-

1910-14 Joseph Franklin Hobson, M.D., WRU, 1886; b. Flushing, 8-30-1861; Assistant in Gynecology and Demonstrator on Anatomy, WRU, 1888-90; Demonstrator in Anatomy, 1890-92; Professor of Minor and Casualty Surgery, WU, 1892-96; of Principles of Surgery, OWU, 1896-1910; Clinical Professor of Surgery, WRU, 1910-14; d. Cleveland, 5-24-1914.

1910-30 Roger Griswold Perkins, A.B., Union Coll., 1893; A.M., 1924; A.B., Harvard Coll., 1894; M.D., Johns Hopkins Univ., 1898; b. Schenectady, N.Y., 5-17-1874; Assistant in Pathology, WRU, 1898-99; Demonstrator, 1899-1901; Lecturer in Bacteriology and Demonstrator in Pathology, 1901-04; Assistant Professor of Pathology and Bacteriology, 1904-08; Associate Professor of Pathology and Hygiene, 1908-10; Professor of Hygiene and Preventive Medicine, 1910-30; Emeritus Professor, 1930-36; d. Wakefield, R.I., 3-28-1936.

1912-36 William Evans Bruner, A.B., Wesleyan Univ., 1888; A.M., 1891; D.Sc. (Hon.), 1928; M.D., Univ. of Pennsylvania, 1891; b. Columbia, Pa., 1-8-1866; Assistant in Ophthalmology, Jefferson Medical Coll., 1893-

94; Assistant in Ophthalmology, WRU, 1894-1900; Demonstrator, 1900-07; Instructor, 1907-10; Lecturer, 1910-12; Clinical Professor, 1912-15; Professor, 1915-36; Emeritus Professor, 1936-

1912-38 Thomas Wingate Todd, M.B., Ch.B., Univ., of Manchester, 1907; F.R.C.S., England, 1911; b. Sheffield, England, 1-15-1885; Assistant Demonstrator in Anatomy, Univ. of Manchester, 1907-08; Senior Demonstrator, 1908-09; Lecturer, 1910-12; Professor of Anatomy, WRU, 1912-38; d. Cleveland, 12-28-1938.

1913-45 Henry John Gerstenberger, Grad. Concordia Coll. (Indiana), 1899; M.D., WRU, 1903; b. Cleveland, 1-9-1881; Assistant in Diseases of Children, WRU, 1907-08; Instructor, 1908-10; Lecturer in Diseases of Infancy, 1910-11; Assistant Professor of Pediatrics, 1911-12; Associate Professor, 1912-13; Professor, 1913-45; Emeritus Professor, 1945-

1914- Howard Thomas Karsner, Grad. School of Pedagogy, Philadelphia, 1899; M.D., Univ. of Pennsylvania, 1903; b. Philadelphia, Pa., 1-6-1879; Demonstrator in Pathology, Univ. of Pennsylvania, 1908-11; Assistant Professor of Pathology, Harvard Medical School, 1911-14; Professor of Pathology, WRU, 1914-

1915-25 William Henry Humiston, M.D., Long Island Hospital Medical Coll., 1879; b. Wellington, 7-27-1855; Lecturer in Gynecology, WRU, 1894-96; Associate Professor, 1896-1915; Clinical Professor, 1915-25; Emeritus Professor, 1925-43; d. Cleveland, 6-15-1943.

1918- Carl John Wiggers, M.D., Univ. of Michigan, 1906, D.Sc., 1941; b. Davenport, Iowa, 5-28-1883; Instructor in Physiology, Univ. of Michigan, 1906-11; Instructor in Physiology, Cornell Univ., 1911-13; Assistant Professor, 1913-18; Professor of Physiology, WRU, 1918-

1921-25 Thomas Ludlow Ferenbaugh, A.B., Kenyon Coll., 1905; M.D., Johns Hopkins Univ., 1909; b. Danville, 5-12-1881; Professor of Military Science and Tactics, 1921-25.

1924-32 Elliott Carr Cutler, A.B., Harvard Coll., 1909; M.D., Harvard Medical Sch., 1913; F.R.C.S., England, 1943; b. Bangor, Me., 7-30-1888; Instructor in Surgery, Harvard Medical Sch., 1919-24; Professor of Surgery, WRU, 1924-32.

1925- Arthur Holbrook Bill, A.B., Adelbert Coll., 1897; A.M., Western Reserve Univ., 1898; M.D., 1901; b. Cleveland, 11-10-1877; Assistant in Obstetrics, WRU, 1905-07; Demonstrator, 1907-08; Instructor, 1908-09; Associate Professor, 1909-25; Professor, 1925-27; Professor of Obstetrics and Gynecology, 1927-

1925-25 John Marvin Ingersoll, A.B., Adelbert Coll., 1891; M.D., WRU, 1893; A.M., Western Reserve Univ., 1896; b. Youngstown, 3-11-1869; Lecturer in Otology, Rhinology, and Laryngology, WRU, 1895-1903; Assistant Professor, 1903-10; Associate Professor, 1910-22; Associate Professor of Otolaryngology, 1922-25; Clinical Professor, 1925 (May to November); Emeritus Professor, 1925-

1925-30 Samuel Fletcher Parker, M.D., Louisville Hospital Medical Coll., 1905; b. 1882; Professor of Military Science and Tactics, 1925-30; d. Memphis, Tenn., 2-6-1945.

1926-30 Karl Halifax Van Norman, M.B., Univ. of Toronto, 1904; M.D., 1928; b. Toronto, Ontario, 5-28-1882; Professor of Hospital Administration, 1926-30.

1927- Victor Caryl Myers, A.B., Wesleyan Univ., 1905; A.M., 1907; D.Sc., 1930; Ph.D., Yale Univ., 1909; b. Buskirk Bridge, N.Y., 4-13-1883; Adjunct Professor of Physiological Chemistry and Experimental Physiology, Albany Medical Coll., 1909-11; Lecturer in Chemical Pathology, New York Post-Graduate Medical Coll., 1911-12; Professor of Pathological Chemistry, 1912-22; of Biochemistry, 1922-24; Professor of Biochemistry, Univ., Iowa, 1924-27; Professor of Biochemistry, WRU 1927-

1929-35 Marion Arthur Blankenhorn, Ph.B., Univ. of Wooster, 1909; D.Sc., 1937; M.D., WRU, 1914; A.M., Western Reserve Univ., 1920; b. Orrville, 11-13-1885; Demonstrator in Medicine, WRU, 1916-17; Instructor, 1917-20; Senior Instructor, 1920-23; Assistant Professor, 1923-26; Associate Professor, 1926-29; Clinical Professor, 1929-35.

1929- Roy Wesley Scott, A.B., Indiana Univ., 1910; M.D., WRU, 1913; A.M., Western Reserve Univ., 1917; b. New Albany, Ind., 3-20-1888; Demonstrator in Medicine, WRU, 1914-15; Instructor in Physiology, 1915-17; Associate, 1917-18; Instructor in Medicine, 1918-20; Senior Instructor, 1920-22; Assistant Professor, 1922-26; Associate Professor, 1926-29; Clinical Professor, 1929-

1929- Joseph Treolar Wearn, B.S., Davison Coll., 1913; D.Sc., 1943; M.D., Harvard Medical Sch., 1917; b. Charlotte, N.C., 2-15-1893; Instructor in Pharmacology, Univ. of Pennsylvania, 1921-23; Instructor in Physiology, Harvard Sch. of Public Health, 1923-25; Instructor in Medicine, Harvard Medical Sch., 1923-24; Assistant Professor, 1924-28; Associate Professor, 1928-29; Professor of Medicine, WRU, 1929-

1930-34 Ross Bradley Bretz, A.B., Indiana Univ., 1906; A.M., 1907; M.D., WRU, 1909; b. Jasper, Ind., 12-2-1883; Professor of Military Science and Tactics, WRU, 1930-34; d. Swannanoa, N.C., 8-5-1943.

1930- James Angus Doull, A.B., Dalhousie Univ., 1910; M.D., Ch.M., 1914; D.P.H., Cambridge Univ., 1919; D.P.H., Johns Hopkins Univ., 1921; b. New Glasgow, Nova Scotia, 9-8-1889; Associate in Epidemiology, Johns Hopkins Univ., 1921-24; Associate Professor, 1924-30; Lecturer in Epidemiology, Univ. of Rio Janeiro, 1926; Professor of Hygiene and Public Health, WRU, 1930-

1930- Carl Henri Lenhart, Ph.B., Adelbert Coll., 1901; M.D., WRU, 1904; b. Cleveland, 9-1-1880; Demonstrator in Physiology, WRU, 1910-13; Demonstrator in Surgery, 1917-18; Instructor, 1918-19; Associate, 1919-24; Clinical Professor, 1930-32; Professor, 1932-

1933-39 William Bricker Chamberlin, A.B., Oberlin Coll., 1896; M.D., WRU, 1900; b. Shelby, 9-30-1873; Assistant in Diseases of Ear, Nose, and Throat, WRU, 1902-09; Instructor, 1909-16; Associate, 1916-22; Assistant Clinical Professor of Otolaryngology, 1922-26; Associate Clinical Professor, 1926-33; Clinical Professor, 1933-39; d. Cleveland, 9-6-1939.

1933- William Hawksley Weir, M.D., C.M., Univ. of Toronto, 1896; b. London, Ontario, 1-5-1876; Demonstrator in Gynecology, WRU,

1902-07; Instructor, 1907-11; Associate, 1911-15; Assistant Professor, 1915-27; Associate Clinical Professor, 1927-33; Clinical Professor, 1933-

1934-35 Humphrey Newton Ervin, M.D., Univ. of Cincinnati, 1912; b. 1883; Professor of Military Science and Tactics, WRU, 1934-35.

1935- Harry Goldblatt, A.B., McGill Univ., 1912; M.D., C.M., 1916; b. Muscatine, Iowa, 3-14-1891; Demonstrator in Pathology, WRU, 1919-21; Assistant Professor, 1924-27; Associate Professor, 1927-35; Professor of Experimental Pathology, 1935-

1936- Harold Newton Cole, Ph.B., Bucknell Univ., 1906; D.Sc., 1918; M.D., WRU, 1909; b. Shingle House, Pa., 2-28-1884; Demonstrator in Dermatology, WRU, 1911-14; Instructor, 1914-16; Associate, 1916-18; Assistant Professor, 1918-21; Associate Professor, 1921-26; Associate Clinical Professor of Dermatology, 1926-30; of Dermatology and Syphilology, 1930-36; Professor, 1936-

1936-37 David Lloyd Stewart, M.D., Chicago, Coll. of Medicine and Surgery, 1909; b. 1883; Professor of Military Science and Tactics, WRU, 1936-37.

1939- Joseph Marchant Hayman, A.B., Haverford, Coll., 1918; M.D., Univ. of Pennsylvania, 1921; b. Philadelphia, Pa., 6-25-1896; Instructor in Pharmacology, Univ. of Pennsylvania, 1923-28; Assistant Professor of Pharmacology and Associate in Medicine, 1928-29; Associate Professor of Medicine, WRU, 1929-39; Professor of Clinical Medicine and Therapeutics, 1939-

1939- Norman Louis Hoerr, A.B., Johns Hopkins Univ., 1923; Ph.D., Univ. of Chicago, 1929; M.D., 1931; b. Peoria, Ill., 5-3-1902; Assistant in Anatomy, Univ. of Chicago, 1925-26; Instructor, 1926-33; Assistant Professor, 1933-39; Professor of Anatomy, WRU, 1939-

1940- Claude Schaefer Beck, A.B., Franklin and Marshall Coll., 1916; D.Sc., 1937; M.D., Johns Hopkins Univ., 1921; b. Shamokin, Pa., 11-8-1894; Associate in Surgery, Harvard Medical Sch., 1923-24; Demonstrator in Surgery, WRU, 1924-25; Instructor, 1925-28; Assistant Professor, 1928-33; Associate Professor, 1933-40; Professor of Neurosurgery, 1940-

1940-44 William Walter Greulich, Ph.B., Kenyon Coll., 1926; A.M., Univ. of Denver, 1928; Ph.D., Leland Stanford Univ., 1934; b. Columbus, 7-29-1899; Instructor in Biology, Regis (Colorado), Coll., 1927-28; Instructor in Biology, Univ. of Colorado, 1928-31; Assistant in Anatomy, Leland Stanford Univ., 1931-1934; Assistant in Anatomy, Yale Univ., 1936-39; Associate in Anatomy and Physical Anthropology, 1939-40; Professor of Physical Anthropology and Anatomy, WRU, 1940-44.

1940- Carlos Eugene Pitkin, M.D., WRU, 1902; b. Brunswick, 4-18-1877; Assistant in Diseases of Children, WRU, 1908-10; Assistant in Nose, Ear, and Throat, 1910-16; Demonstrator in Otolaryngology, 1916-17; Instructor, 1917-21; Senior Instructor, 1921-23; Associate, 1923-27; Assistant Clinical Professor, 1927-40; Clinical Professor, 1940-

1940- John Augustus Toomey, A.B., St. Ignatius (Cleveland) Coll., 1910; A.M., 1912; LL.B., Cleveland Law School, 1913; M.D., WRU, 1919; b. Cleveland, 5-25-1889; Demonstrator in Anatomy, WRU, 1920-22;

Demonstrator in Medicine, 1921-22; Instructor in Pediatrics, 1922-24; Senior Instructor in Contagious Diseases, 1924-28; Assistant Professor, 1928-33; Associate Professor of Pediatrics, 1933-40; Professor of Pediatrics and Contagious Diseases, 1940-

1940-42 Harry Hill Van Kirk, M.D., Starling Medical Coll., 1898; b. 1873; Professor of Military Science and Tactics, WRU, 1940-42.

1942- Enrique Eduardo Ecker, Ph.D., Univ. of Chicago, 1917; b. Willemstad, Curacao, Dutch West Indies, 1-26-1887; Demonstrator in Hygiene and Bacteriology, WRU, 1918-19; Instructor in Immunology, 1919-22; Senior Instructor, 1922-24; Assistant Professor, 1924-27; Associate Professor, 1927-42; Professor, 1942-

1942-45 Frederick Starr Wright, A.B., Lafayette, Coll., 1902; M.D., Columbia Univ., 1906; Grad., Army Medical Sch., 1909; b. Dodge Center, Kan., 10-16-1878; Professor of Military Science and Tactics, WRU, 1942-45.

1943-44 Edward Muntwyler, A.B., Univ. of Denver, 1924; M.S., Univ. of Iowa, 1927; Ph.D., 1928; b. Denver, Col., 7-18-1903; Demonstrator of Biochemistry, WRU, 1927-28; Instructor, 1928-29; Senior Instructor, 1929-33; Assistant Professor, 1933-35; Associate Professor, 1935-43; Professor of Experimental Biochemistry, 1943-44.

1943-45 John Paul Quigley, B.S., Syracuse Univ., 1918; M.S., University of Minnesota, 1921; Ph.D., Univ. of Chicago, 1929; b. Syracuse, N.Y., 4-25-1896; Instructor in Physiology and Pharmacology, University of Georgia, 1924-25; Instructor in Physiology and Pharmacology, Univ. of Alberta, 1925-28; Instructor in Physiology, Univ. of Chicago, 1928-29; Senior Instructor in Physiology, WRU, 1929-33; Assistant Professor, 1933-35; Associate Professor, 1935-43; Professor of Gastro-Intestinal Physiology, 1943-45.

b. Adjunct Professors

Only two men held this titlte. One who was appointed in 1856 became a professor in 1861. Another who was appointed in 1871 became a professor in 1872.

c. Acting Professors

Five men were given this title in 1890 and another in 1893. All soon became professors.

d. Extraordinary Professors

1892-94 Frederick David Brandenburg, A.B., Lafayette Coll., 1884; M.D., Bellevue Hospital Medical Coll., 1885; b. Pittston, Pa., 2-26-1862; Lecturer in Gynecology, WRU, 1891-92; Extraordinary Professor, 1892-94; d. Rockton, Wis., 11-17-1941.

One other man received this title in 1892 and became a professor in 1893.

e. Associate Professors

1910-20 John Nicholas Lenker, M.D., Baltimore Coll. of Physicians and Surgeons, 1886; b. 1865; Assistant in Diseases of Ear, Nose, and Throat, OWU, 1899-1902; Instructor, 1902-03; Lecturer, 1903-04; Professor, 1904-

10; Associate Clinical Professor of Otology, Rhinology and Laryngology, WRU, 1910-20; d. Cleveland, 10-20-1932.

1910-13 John Bernard McGee, M.D., WRC, 1878; b. Boston, Mass., 7-3-1853; Lecturer in Therapeutics, OWU, 1895-99; Professor of Therapeutics, 1899-1910; Associate Professor of Therapeutics, WRU, 1910-14; d. Cleveland, 2-10-1923.

1910-20 Roland Edward Skeel, M.D., Univ. of Michigan, 1890; A.M., 1915; M.S., Ohio Wesleyan Univ., 1915; b. Fulton, N.Y., 2-9-1869; Lecturer in Obstetrics, OWU, 1896-98; Professor of Obstetrics, 1898-1909; of Gynecology, 1909-10; Dean, 1900-10; Associate Clinical Professor of Gynecology, WRU, 1910-20; d. Covina, Calif., 9-4-1925.

1910-17 John George Spenzer, M.D., WRU, 1884; Ph.D., Univ. of Strassburg, 1893; b. Cleveland, 9-6-1864; Assistant in Chemistry, Adelbert Coll., 1884-87; Instructor in Pharmacology and Experimental Therapeutics, WRU, 1894-96; Professor of Chemistry and Pharmacology, OWU, 1896-1910; Associate Professor of Legal Chemistry, WRU, 1910-12; of Medical Jurisprudence and Legal Chemistry, 1912-17; d. Cleveland, 7-26-1923.

1912-22 Charles Edwin Briggs, A.B., Oberlin Coll., 1893; A.M., 1897; M.D., Harvard Univ., 1897; b. Calumet, Mich., 4-7-1871; Assistant in Surgery, WRU, 1899-1900; Demonstrator, 1901-03; Instructor, 1903-09; Lecturer in Surgical Operations and Technique, 1907-09; Assistant Professor of Surgery, 1909-12; Associate Professor, 1912-22; d. Cleveland, 1-30-1937.

1912-15 Howard Davis Haskins, A.B., Univ. of Michigan, 1892; M.D., WRU, 1895; b. Springfield, Mass., 4-25-1871; Assistant in Chemistry and Pharmacology, OWU, 1892-93; Instructor in Pharmacology and Experimental Therapeutics, WRU, 1896-97; in Organic Chemistry, 1906-07; Assistant Professor of Organic Chemistry and Biochemistry, 1907-12; Associate Professor, 1912-15; d. Portland, Ore., 11-22-1933.

1913-37 Norman William Ingalls, B.S., Baldwin Univ., 1901; M.D., WRU, 1905; b. LaGrange, 8-10-1880; Demonstrator in Anatomy, WRU, 1905-06; Instructor, 1906-09; Assistant Professor, 1909-13; Associate Professor, 1913-37.

1914-31 William Edgar Lower, M.D., WU, 1891; b. Canton, 5-6-1867; Assistant in Physiology, WU, 1894-96; Demonstrator in Surgery, OWU, 1896-1900; Demonstrator in Surgery, WRU, 1900-04; Lecturer in Genito-Urinary Diseases, 1904-10; Assistant Professor of Genito-Urinary Surgery, 1910-14; Associate Professor, 1914-31.

1915-20 David Marine, A.B., Western Maryland Coll., 1900; A.M., 1906; M.D., Johns Hopkins Univ., 1905; D.Sc., Western Reserve Univ., 1931; b. Whiteleysburg, Md., 9-20-1880; Demonstrator in Pathology, WRU, 1905-06; in Neuro-Pathology, 1906-07; Instructor in Experimental Medicine, 1906-10; Lecturer, 1910-12; Assistant Professor, 1912-15; Associate Professor, 1915-20.

1916-18 Edward Perkins Carter, M.D., Univ. of Pennsylvania, 1894; A.M., Williams Coll., 1916; b. Williamstown, Mass., 3-13-1870; Teaching Fellow in Pathology, Johns Hopkins Hospital, 1896-97; Lecturer in Medical

Jurisprudence, WRU, 1899-01; Demonstrator in Dermatology and Syphilology, 1901-03; Demonstrator in Medicine, 1903-07; Lecturer in Clinical Medicine, 1907-10; Assistant Professor, 1910-16; Associate Professor, 1916-18.

1916-21 Louis Williams Ladd, A.B., Yale Univ., 1895; M.D., Johns Hopkins Univ., 1899; b. Milwaukee, Wis., 3-15-1873; Lecturer in Clinical Microscopy, WRU, 1901-10; Assistant Professor, 1910-16; Associate Professor, 1916-21.

1917-18 Cyrus Hartwell Fiske, A.B., Univ. of Minnesota, 1910; M.D., Harvard Univ., 1914; b. St. Paul, Minn., 9-22-1890; Assistant in Biochemistry, Harvard Medical Sch., 1914-15; Associate in Biochemistry, WRU, 1915-17; Associate Professor, 1917-18.

1920-21 Paul John Hanzlik, Ph.G., Univ. of Iowa, 1902; Ph.C., 1908; A.B., Univ. of Illinois, 1908; A.M., 1911; M.D., WRU, 1912; b. Sheuyville, Iowa, 7-24-1885; Demonstrator in Pharmacology and Materia Medica, WRU, 1912-13; Instructor, 1913-15; Associate, 1915-17; Assistant Professor, 1917-20; Associate Professor, 1920-21.

1921-27 Clyde Lottridge Cummer, Ph.B., Adelbert Coll., 1904; M.D., WRU, 1907; b. Cadillac, Mich, 2-23-1882; Assistant in Medicine, WRU, 1908-09; Demonstrator in Clinical Microscopy, 1909-10; Instructor, 1910-12; Associate, 1912-14; Assistant Professor, 1914-21; Associate Professor, 1921-27; Demonstrator in Dermatology and Syphilology, 1926-27; Clinical Instructor, 1927-33; Senior Clinical Instructor, 1933-35; Assistant Clinical Professor, 1935-

1921-34 Bradley Merrill Patten, A.B., Dartmouth Coll., 1911; A.M., Harvard Univ., 1912; Ph.D., 1914; b. Milwaukee, Wis., 6-14-1889; Assistant in Zoology, Harvard Univ., 1912-14; Instructor in Histology and Embryology, WRU, 1914-16; Senior Instructor, 1916-18; Assistant Professor, 1918-21; Associate Professor, 1926-34.

1922-34 Julius Moses Rogoff, Ph.G., Ohio Northern Univ., 1900; D.Sc., 1933; M.D., OWU, 1908; b. in Russia, 1884; Assistant in Physiology, OWU, 1908-10; Demonstrator in Physiology and Pharmacology, Vanderbilt Univ., 1912-13; Instructor, 1913-14; Assistant Professor of Materia Medica and Pharmacy, 1914-15; Instructor in Experimental Medicine, WRU, 1915-17; Senior Instructor, 1917-19; Assistant Professor, 1919-22; Associate Professor, 1922-34.

1923-26 James Lucien Morris, B.S., Hanover Coll., 1907; A.M., Harvard Univ., 1911; Ph.D., 1914; b. Corydon, Ind., 9-23-1885; Assistant Professor of Biology, Park Coll., 1907-08; Professor of Natural Science, Hillsdale Coll., 1908-11; Assistant in Biochemistry, Harvard Medical Sch., 1913-14; Associate in Biochemistry, Washington Univ., 1914-17; Associate in Physiological Chemistry, Univ. of Illinois, 1917-18; Assistant Professor of Biochemistry, WRU, 1918-23; Associate Professor, 1923-26; d. New York City, 3-19-1926.

1924-34 Gaius Elijah Harmon, M.B., Boston Univ., 1908; M.D., 1909; C.P.H., Harvard Univ., 1914; b. Wilmington, Mass., 6-13-1887; Instructor in Hygiene, WRU, 1914-16; Senior Instructor, 1916-18; Assistant Professor of Hygiene and Bacteriology, 1918-25; Associate Professor, 1925-29; Associate Professor Hygiene and Vital Statistics, 1929-34.

1925-1939 Charles Walter Stone, A.B., Washington and Jefferson Coll., 1901; A.M., 1904; M.D., Johns Hopkins Univ., 1905; b. Allegheny, Pa., 6-11-1879; Demonstrator of Physical Diagnosis, WRU, 1907-08; Instructor in Nervous Diseases, 1909-10; Lecturer, 1910-12; Assistant Professor, 1912-25; Associate Professor, 1925-39; d. Cleveland, 12-9-1939.

1928-33 Alfred Theodore Shohl, A.B., Harvard Univ., 1910; M.D., 1914; b. Cincinnati, 12-29-1889; Assistant in Pediatrics, Johns Hopkins Univ., 1915-17; Assistant in Urology, 1917-20; Associate Professor of Chemical Hygiene, 1920-21; Associate Professor of Pediatrics, Yale Univ., 1921-27; Associate Professor of Pediatrics, WRU, 1928-33.

1929-33 George Burrill Ray, B.S., Massachusetts Coll., 1916; A.M., Harvard Univ., 1921; Ph.D., 1922; b. Boston, Mass., 5-9-1893; Instructor in Physiology, Harvard Medical Sch., 1922-23; Instructor in Physiology, Harvard Sch. of Public Health, 1923-24; Senior Instructor in Physiology, WRU, 1924-26; Assistant Professor, 1926-29; Associate Professor, 1929-33; d. Brooklyn, N.Y., 7-6-1945.

1930- Abram Breneman Bruner, A.B., Wesleyan Univ., 1913; M.D., Columbia Univ., 1916; b. Columbia, Pa., 10-13-1891; Demonstrator in Ophthalmology, WRU, 1921-22; Instructor, 1922-26; Senior Clinical Instructor, 1926-29; Assistant Clinical Professor, 1929-30; Associate Clinical Professor, 1930-

1930- Gerald Spencer Shibley, A.B., Columbia Univ., 1913; M.D., 1916; b. London, England, 3-19-1890; Associate in Medicine, Hunan (China) Medical Coll., 1919-22; Instructor in Medicine, Columbia Univ., 1924-25; Associate, 1926-28; Assistant Professor, 1928-30; Associate Professor of Medicine, WRU, 1930-35; Associate Clinical Professor, 1935-

1933-43 Frederick Cowles Herrick, A.B., Amherst Coll., 1894; M.D., WRU, 1897; b. Cleveland, 10-31-1872; Assistant in Surgery, WRU, 1899-00; Demonstrator, 1900-07; Instructor, 1907-10; Lecturer, 1910-11; Associate, 1911-21; Assistant Clinical Professor, 1921-33; Associate Clinical Professor, 1933-43; d. Cleveland, 4-5-1943.

1933-38 Wilton Marion Krogman, Ph.B., Univ. of Chicago, 1926; A.M., 1927; Ph.D., 1929; b. Oak Park, Ill., 6-28-1903; Instructor in Physical Anthropology, Univ. of Chicago, 1929-30; Associate Professor of Physical Anthropology, Graduate School of Western Reserve Univ., 1931-33; Associate Professor of Anatomy and Physical Anthropology, WRU, 1933-38.

1933-37 Alan Richards Moritz, B.S., Univ. of Nebraska, 1920; A.M., 1921; M.D., 1923; b. Hastings, Neb., 12-25-1899; Instructor in Pathology, WRU, 1925-27; Senior Instructor, 1927-29; Assistant Professor, 1929-33; Associate Professor, 1933-37.

1933- James Douglas Pilcher, A.B., Adelbert Coll., 1902; M.D., WRU, 1905; b. Guelph, Ontario, 11-2-1879; Demonstrator in Pathology, WRU, 1905-06; Demonstrator in Pharmacology and Materia Medica, 1908-09; Instructor, 1909-11; Associate, 1911-13; Assistant Professor of Pharmacology, 1913-14; Professor of Pharmacology, Univ. of Nebraska, 1914-17; Demonstrator in Pediatrics, WRU, 1923-24; Instructor, 1924-26; Senior Instructor, 1926-28; Assistant Professor, 1928-33; Associate Professor, 1933-

1934- Samuel Wood Chase, A.B., Bowdoin Coll., 1914; A.M., Harvard Univ., 1916; Ph.D., 1921; b. Lowell, Mass., 5-27-1892; Demonstrator in Histology and Embryology, WRU, 1920-22; Instructor, 1922-24; Senior Instructor, 1924-26; Assistant Professor, 1926-34; Associate Professor, 1934-

1934-41 Emerson McGrail, A.B., Adelbert Coll., 1912; M.D., WRU, 1915; b. Wheeling, W.Va., 6-4-1890; Instructor in Hygiene and Bacteriology, WRU, 1919-22; Senior Instructor, 1922-24; Assistant Professor, 1924-34; Associate Professor, 1934-41; d. Cleveland, 10-21-1941.

1934-45 Norman Carl Wetzel, A.B., Adelbert Coll., 1918; M.D., WRU, 1921; b. Cleveland, 2-16-1897; Instructor in Pediatrics, 1926-28; Senior Instructor, 1928-30; Assistant Professor, 1930-34; Associate Professor, 1934-45.

1935-36 Orpheus William Barlow, A.B., Univ. of Missouri, 1920; A.M., 1923; Ph.D., Univ. of Chicago, 1926; M.D., Rush Medical College, 1935; b. Webb City, Mo., 10-30-1896; Instructor in Physiology and Pharmacology, Univ. of Missouri, 1921-24; Instructor in Pharmacology, WRU, 1924-27; Senior Instructor, 1927-29; Assistant Professor, 1929-34; Associate Professor, 1934-36.

1935-39 John James Thomas, A.B., Adelbert Coll., 1891; M.D., WRU, 1893; A.M., Western Reserve Univ., 1896; b. Cleveland, 11-18-1868; Assistant in Surgery, WRU, 1897-98; Assistant in Diseases of Children, 1898-1903; Demonstrator, 1903-09; Assistant in Obstetrics, 1903-07; Instructor, 1907-11; Associate, 1911-15; Assistant Professor, 1915-35; Associate Professor, 1935-39; Emeritus Associate Professor, 1939-

1937-44 Paul György, M.D., Univ. of Budapest, 1915; M.D.,Univ. of Heidelberg, 1923; b. Nagyvarad, Hungary, 4-7-1893; Professor of Pediatrics, Univ .of Heidelberg, 1927-33; Assistant Professor of Pediatrics, WRU, 1935-37; Associate Professor, 1937-44.

1937- Louis Joseph Karnosh, B.S., Berea (Kentucky) Coll., 1913; D.Sc., 1926; M.D., WRU, 1920; b. Bellaire, 3-20-1892; Demonstrator in Nervous Diseases, 1921-23; Instructor, 1923-25; Senior Instructor, 1925-27; Assistant Clinical Professor, 1927-37; Associate Clinical Professor, 1937-

1938- Harold Feil, M.D., OWU, 1911; A.B., Univ. of Denver, 1914; b. Bay Shore, N.Y., 6-26-1889; Demonstrator in Medicine, WRU, 1913-27; Instructor, 1927-33; Assistant Clinical Professor, 1933-38; Associate Clinical Professor, 1938-

1938- Donald Mitchell Glover, A.B., Univ. of Illinois, 1916; M.D., Harvard Univ., 1920; b. Urbana, Ill., 8-2-1895; Demonstrator in Anatomy, WRU, 1924-30; Demonstrator in Surgery, 1925-33; Senior Clinical Instructor, 1933-34; Assistant Clinical Professor, 1934-38; Associate Clinical Professor, 1938-

1939- Argyl Jackson Beams, A.B., Wittenberg Coll., 1915; M.D., WRU, 1919; b. Spencerville, Ind., 7-14-1891; Demonstrator in Medicine, WRU, 1921-23; Instructor, 1923-27; Senior Instructor, 1927-33; Assistant Clinical Professor, 1933-39; Associate Clinical Professor, 1939-

1940- William Raymond Barney, A.B., Adelbert Coll., 1910; M.D., WRU, 1914; b. Cleveland, 11-23-1887; Demonstrator in Obstetrics and Gyne-

cology, WRU, 1919-21; Instructor in Obstetrics, 1921-23; Senior Instructor, 1923-33; Assistant Clinical Professor, 1933-40; Associate Clinical Professor, 1940-

1940-45 Harold David Green, B.S., Coll. of Wooster, 1927; M.D., WRU, 1931; b. Zanesville, 8-11-1905; Instructor in Physiology, WRU, 1933-35; Instructor in Physiology, Yale University, 1935-36; Senior Instructor in Physiology, WRU, 1936-37; Assistant Professor, 1937-40; Associate Professor, 1940-45.

1940- Maxwell Harbin, B.S., Univ. of Georgia, 1916; M.D., Harvard Univ., 1920; b. Calhoun, Ga., 12-7-1893; Instructor in Orthopedic Surgery, WRU, 1925-26; Assistant Professor, 1926-40; Associate Professor, 1940-

1940- James Joel Joelson, M.D., Columbia Univ., 1920; b. Paterson, N.J., 2-15-1897; Instructor in Surgery, Yale Univ., 1923-24; Demonstrator in Genito-Urinary Surgery, WRU, 1924-25; Instructor, 1925-28; Assistant Professor, 1928-40; Associate Clinical Professor, 1940-

1940- Robert Frederic Parker, B.S., Washington Univ., 1927; M.D., 1929; b. St. Louis, Mo., 10-29-1907; Assistant in Medicine, Washington Univ., 1931-32; Instructor, 1932-35; Senior Instructor in Medicine, WRU, 1936-37; Assistant Professor, 1937-40; Associate Professor, 1940-

1941- James Russell Driver, B.S., Ohio Wesleyan Univ., 1912; M.D., WRU, 1916; b. Basil, 12-16-1888; Demonstrator in Dermatology, 1919-21; Instructor, 1921-23; Associate in Dermatology and Syphilology, 1923-25; Assistant Clinical Professor, 1925-41; Associate Clinical Professor, 1941-

1941-44 Donald Eaton Gregg, B.S., Colgate Univ., 1924; M.S., Univ. of Rochester, 1929; Ph.D., 1930; b. Bridgeport, Conn., 3-24-1902; Instructor in Physiology, WRU, 1930-33; Senior Instructor, 1933-34; Assistant Professor, 1934-41; Associate Professor, 1941-44.

1943- Raymond C. McKay, A.B., Brown Univ., 1915; M.D., WRU, 1920; b. Youngstown, 6-5-1892; Demonstrator in Medicine, WRU, 1922-23; Instructor, 1923-28; Senior Instructor, 1928-34; Assistant Clinical Professor, 1934-43; Associate Clinical Professor, 1943-

Vital statistics are not recorded beyond this point.

f. Assistant Professors

1898-1901 William Henry Nevison, A.B., Univ. of Kansas, 1882; M.D., WRU, 1887; Assistant in Surgery, WRU, 1893-94; Instructor, 1894-96; Lecturer in Minor Surgery, 1896-98; Assistant Professor of Surgery, 1898-1901.

1903-07 William Reynolds Lincoln, M.D., Univ. of Pennsylvania, 1888; Lecturer in Otology, Rhinology, and Laryngology, WRU, 1895-1903; Assistant Professor, 1903-07.

1909-20 Henry Augustus Becker, M.D., WRU, 1894; Demonstrator in Surgical Appliances, WRU, 1898-1900; Demonstrator in Surgery, 1900-04; Lecturer in Fractures and Dislocations, 1903-09; Assistant Clinical Professor of Surgery, 1909-20.

1909-29 John Phillips, M.B., Univ. of Toronto, 1903; Demonstrator in Anatomy, WRU, 1906-07; Demonstrator in Medicine, 1906-08; Instructor,

1908-09; Assistant Professor, 1909-19; Assistant Professor of Therapeutics, 1919-29.

1910-16 Milton Jay Lichty, Ph.B., Mt. Union Coll., 1892; A.M., 1908; M.D., Univ. of Pennsylvania, 1895; Lecturer in Medicine and Physical Diagnosis, OWU, 1901-05; Professor of Medicine, 1905-10; Assistant Clinical Professor of Medicine, WRU, 1910-16.

1910-13 Robert Gilcrest Schnee, M.D., OWU, 1897; Lecturer in Bacteriology and Pathology, OWU, 1898-1902; Associate Professor, 1902-05; Professor, 1905-10; Assistant Professor of Bactoriology and Pathology, WRU, 1910-13.

1910-13 Oscar John Theodore Schulz, A.B., Univ. of Indiana, 1893; M.D., Johns Hopkins Univ., 1903; Demonstrator in Pathology, WRU, 1903-06; Demonstrator in Protozoology, 1905-06; Instructor in Pathology, 1906-07; Lecturer in Pathology and Protozoology, 1907-10; Assistant Professor of Pathology, 1910-13.

1910-19 Arthur Julius Skeel, M.D., OWU, 1897; Assistant in Anatomy, OWU, 1899-1900; Demonstrator, 1900-01; Lecturer, 1901-04; Professor, 1904-09; Lecturer in Obstetrics, 1906-09; Professor, 1909-10; Assistant Clinical Professor of Obstetrics, WRU, 1910-19.

1910-19 Morris Daniel Stepp, M.D., WRU, 1893; Assistant in Surgery, OWU, 1896-1900; Lecturer, 1900-05; Professor of Operative Surgery, 1905-10; Assistant Clinical Professor of Surgery, WRU, 1910-19.

1910-16 Harrison Girard Wagner, M.D., WU, 1895; Assistant in Physical Diagnosis, WRU, 1896-97; Assistant in Medicine, 1897-99; Instructor in Physical Diagnosis, OWU, 1900-01; Lecturer, 1901-02; Demonstrator in Physical Diagnosis, WRU, 1902-07; Instructor, 1907-10; Assistant Professor, 1910-16.

1913-18 Davidson Davidson Black, M.B., Univ. of Toronto, 1906; A.B., 1911; M.A., 1924; D.Sc., 1930; Assistant in Histology, Univ. of Toronto, 1907-09; Instructor in Histology and Embryology, WRU, 1909-11; Associate, 1911-13; Assistant Professor of Anatomy, 1913-18.

1918-24 Eugene Lyman Porter, A.B., Harvard Univ., 1904; Ph.D., 1912; A.M., Univ. of Michigan, 1908; Assistant Professor of Natural Science, Transylvania Coll., 1904-06; Professor of Natural Science, Adrian Coll., 1906-07; Instructor in Physiology, Simmons Coll., 1913-15; Instructor in Physiology, Univ. of Pennsylvania, 1915-18; Assistant Professor of Physiology, WRU, 1918-24.

1919-30 George Bourne Farnsworth, A.B., Bowdoin Coll., 1903; M.D., Harvard Univ., 1907; Demonstrator in Obstetrics, WRU, 1910-11; Instructor, 1911-15; Associate, 1915-19; Assistant Professor, 1919-30.

1921-27 Maurice Leonard Richardson, M.D., Detroit Coll. of Medicine and Surgery, 1913; Instructor in Pathology, WRU, 1916-19; Senior Instructor, 1919-21; Assistant Professor, 1921-27.

1921-28 George Byron Roth, A.B., Univ. of Michigan, 1906; M.D., 1909; Instructor in Pharmacology, Univ. of Michigan, 1909-13; Assistant Professor of Pharmacology, WRU, 1921-24.

1923-32 Roy Bartlett Metz, M.D., WRU, 1901; Demonstrator in Physiology, WRU, 1901-02; Assistant in Ophthalmology, 1911-14; Demonstra-

tor, 1914-16; Instructor, 1916-17; Associate, 1917-23; Assistant Clinical Professor, 1923-32.

1924-43 Russell Hall Birge, A.B., Brown Univ., 1894; M.D., Harvard Univ., 1898; Demonstrator in Surgery, WRU, 1901-07; Instructor, 1907-22; Associate, 1922-24; Assistant Professor, 1924-27; Assistant Clinical Professor, 1927-43.

1924-28 Allen Graham, M.D., Bellevue Medical Coll., 1909; Demonstrator in Surgical Pathology, WRU, 1912-19; Demonstrator in Surgery, 1914-19; Instructor, 1919-24; Assistant Professor, 1924-28.

1924-25 Emile Holman, A.B., Stanford Univ., 1911; A.B., Oxford Univ., 1916; M.D., Johns Hopkins Univ., 1918; Instructor in Surgery, Johns Hopkins Univ., 1923-24; Assistant Professor of Surgery, WRU, 1924-25.

1925- Charles Wason Burhans, A.B., Wabash Coll., 1911; M.D., WRU, 1915; Demonstrator in Pathology, WRU, 1916-18; Instructor in Pediatrics, 1919-21; Senior Instructor, 1921-25; Assistant Professor, 1925-31; Assistant Clinical Professor, 1931-

1925-39 Chester Dale Christie, A.B., Wittenberg Coll., 1908; M.D., WRU, 1913; Demonstrator in Medicine, WRU, 1916-17; Instructor, 1917-22; Associate, 1922-25; Assistant Clinical Professor, 1925-39.

1925-29 Robert Nelson Hoyt, B.S., Massachusetts Institute of Technology, 1909; C.H.P., Harvard Univ. and Massachusetts Institute of Technology, 1920; D.P.H., Univ. of Georgia, 1925; Lecturer in Public Health Administration, Harvard Univ., 1914-16; Lecturer in Hygiene, Univ. of California, 1917-18; Instructor in Preventive Medicine, Univ. of Georgia, 1920-24; Assistant Professor, 1924-25; Assistant Professor of Bacteriology, WRU, 1925-29; Associate in Parasitology, 1929-

1926-29 David Rapport, A.B., Harvard Univ., 1912; M.D., 1916; Instructor in Physiology, Harvard Univ., 1920-21; Senior Instructor in Physiology, WRU, 1924-26; Assistant Professor, 1926-29.

1927-31 Howard Horace Beard, B.S., Univ. of South Carolina, 1914; A.M., Columbia Univ., 1921; Ph.D., Yale Univ., 1925; Professor of Physical Sciences, Chicora Coll., 1921-23; Assistant in Physiological Chemistry, Yale Univ., 1924-25; Senior Instructor in Biochemistry, WRU, 1925-27; Assistant Professor, 1927-31.

1927-30 Louis Nelson Katz, A.B., Adelbert Coll., 1918; M.D., WRU, 1921; A.M., 1923; Demonstrator in Medicine, WRU, 1922-23; Demonstrator in Physiology, 1923-24; Senior Instructor, 1925-27; Assistant Professor, 1927-30.

1927- Benjamin Schoenbrun Kline, A.B., Swarthmore Coll., 1907; M.D., Johns Hopkins Univ., 1911; Assistant in Pathology, Johns Hopkins Univ., 1912-14; Instructor in Pathology, Columbia Univ., 1915-17; Associate, 1919-21; Instructor in Pathology, WRU, 1921-23; Associate, 1923-27; Assistant Professor, 1927-

1927-28 Horace Marshall Korns, A.B., Muskingum Coll., 1916; M.D., WRU, 1918, A.M., 1921; Demonstrator in Medicine, WRU, 1920-21, Instructor, 1921-25; Senior Instructor, 1925-27, Assistant Clinical Professor, 1927-28.

1927-40 Oscar Theodore Thomas, M.D., Univ. of Pennsylvania, 1892; As-

sistant in Gynecology, WRU, 1894-1901; Demonstrator, 1901-13; Instructor, 1913-15; Associate, 1915-27; Assistant Clinical Professor, 1927-40.

1928-31 Charles Clifton McCoy, B.S., Princeton Univ., 1915; M.D., Johns Hopkins Univ., 1920; Instructor in Pathology, Johns Hopkins Univ., 1920-22; Instructor in Medicine, Columbia Univ., 1924-25; Instructor in Roentgenology, WRU, 1925-28; Assistant Professor, 1928-31.

1928-29 Otto Saphir, M.D., Univ. of Vienna, 1921; Instructor in Pathology, WRU, 1924-26; Senior Instructor, 1926-28; Assistant Professor, 1928-29.

1929-33 David Philip Seecof, M.D., Bellevue Medical Coll., 1918; Associate Professor of Pathology, Univ. of Colorado, 1927-29; Assistant Professor of Pathology, WRU, 1929-33.

1929-34 Wolfgang Felix von Oettingen, Ph.D., Univ. of Goettingen, 1913; M.D., Univ. of Heidelberg, 1916; Instructor in Pharmacology, WRU, 1925-27; Senior Instructor, 1927-29; Assistant Professor, 1929-34.

1930- Marion Drexel Douglass, A.B., Kenyon Coll., 1917; M.D., Johns Hopkins Univ., 1921; Demonstrator in Gynecology, WRU, 1924-25; Demonstrator in Obstetrics, 1925-26; Instructor in Gynecology, 1927-29; Senior Instructor, 1929-30; Assistant Professor, 1930-38; Assistant Clinical Professor, 1938-

1930- John Anthony Stephen Gammel, M.D., Julius Maximilians Univ., 1922; Demonstrator in Dermatology, WRU, 1924-25; Instructor in Dermatology and Syphilology,, 1926-28; Senior Clinical Instructor, 1928-30; Assistant Clinical Professor, 1930-

1930- John Edward Rauschkolb, A.B., Ohio State Univ., 1920; M.D., WRU, 1923; Demonstrator in Dermatology, WRU, 1925-26; Instructor in Dermatology and Syphilology, 1926-28; Senior Clinical Instructor, 1928-30; Assistant Clinical Professor, 1930-

1930-45 Walter Black Rogers, A.B., Washington and Jefferson Coll., 1906; M.D., Johns Hopkins Univ., 1910; Assistant in Surgery, WRU, 1912-13, 1915-16; Demonstrator, 1916-19; Instructor, 1919-27; Clinical Instructor, 1927-28; Senior Clinical Instructor, 1928-30; Assistant Clinical Professor, 1930-45.

1931- Samuel Oscar Freedlander, A.B., Adelbert Coll., 1915; M.D., WRU, 1918; Demonstrator in Surgery, WRU, 1920-23, 1924-25; Instructor, 1925-30; Senior Instructor, 1930-31; Assistant Professor, 1931-

1931-34 David Steel, Ph.B., Brown Univ., 1916, M.D., Johns Hopkins Univ., 1920; Demonstrator in Dermatology, WRU, 1927-29; Demonstrator in Roentgenology, 1929-30; Instructor, 1930-31; Assistant Professor, 1931-34.

1933-45 John Dickenson, M.D., WRU, 1901; Assistant in Obstetrics, WRU, 1903-07; Assistant in Surgery, 1903-09; Instructor, 1909-22; Associate, 1922-29; Senior Clinical Instructor, 1929-33; Assistant Clinical Professor, 1933-45.

1933- Thomas Joseph Hill, D.D.S., WRU, 1908; Senior Instructor in Pathology, WRU, 1929-33; Assistant Professor, 1933-

1933- Hagope Gness Miskjien, A.B., Robert Coll., 1906; M.D., Univ. of Paris, 1913; A.M., WRU, 1925; Demonstrator in Dermatology, WRU,

1924-27; Clinical Instructor in Dermatology and Syphilology, 1927-30; Senior Clinical Instructor, 1930-33; Assistant Clinical Professor, 1933-

1933-38 Joseph Tate Smith, A.B., Johns Hopkins Univ., 1903; M.D., 1907; Assistant in Ophthalmology, WRU, 1911-12; Demonstrator in Gynecology, 1912-19; Instructor in Obstetrics, 1919-21; Associate, 1921-27; Senior Clinical Instructor, 1927-33; Assistant Clinical Professor, 1933-38.

1934-36 Franklin Church Bing, A.B., Univ. of Pennsylvania, 1924; Ph.D., Yale Univ., 1930; Instructor, Davis and Elkins Coll., 1924-25; Instructor in Physiological Chemistry, Medical Coll. of State of South Carolina, 1925-26; Assistant in Biochemistry, Yale Univ., 1927-29; Instructor in Biochemistry, WRU, 1929-33; Senior Instructor, 1933-34; Assistant Professor, 1934-36.

1934-45 Eugene Freedman, M.D., Royal Roumanian Medical School, 1921; Demonstrator in Gynecology, WRU, 1929-30; in Roentgenology, 1930-33; Instructor, 1933-34; Senior Instructor, 1934; Assistant Professor, 1934-45.

1934-44 Ramon Francis Hanzal, A.B., Nebraska State Teachers Coll., 1926; A.M., WRU, 1929; Ph.D., 1930; Instructor in Pathological Chemistry, WRU, 1930-33; Senior Instructor, 1933-34; Assistant Professor, 1934-44.

1934- Edward Patrick Neary, A.B., St. Ignatius Coll., 1908; M.D., WRU, 1912; Demonstrator in Surgery, WRU, 1917-20; Instructor, 1920-28; Senior Clinical Instructor, 1928-34; Assistant Clinical Professor, 1934-

1934-41 Herbert Siegfried Reichle, B.S., Columbia Coll., 1919; M.D., Univ. of Freiburg, 1931; Instructor in Pediatrics, New York Post-Graduate Medical School, 1924-25; Demonstrator in Pathology, WRU, 1928-29; Instructor in Pediatrics, 1929-30; Senior Instructor, 1930-33; Senior Instructor in Pathology, 1933-34; Assistant Professor, 1934-41.

1934- James Leonard Reycraft, A.B., WRU, 1912; M.D., 1915; A.M., 1916; Demonstrator in Gynecology, 1921-26; Clinical Instructor, 1926-28; Senior Clinical Instructor, 1928-34; Assistant Clinical Professor, 1934-

1934-38 Henry Lindsay Sanford, A.B., Harvard Univ., 1896; M.D., 1900; Assistant in Surgery, WRU, 1905-08; Demonstrator, 1908-14; Instructor in Genito-urinary Surgery, 1914-20, 1921-22; Associate, 1922-27; Senior Clinical Instructor, 1927-34; Assistant Clinical Professor, 1934-38.

1935- John Woodford Holloway, A.B., WRU, 1918; M.D., 1923; Instructor in Surgery, WRU, 1927-33; Senior Instructor, 1933-35; Assistant Clinical Professor, 1936-

1935- Arthur James Horesh, A.B., WRU, 1923; M.D., 1927; Senior Instructor in Pediatrics, 1933-35; Assistant Clinical Professor, 1935-

1935- Fred Christopher Oldenburg, M.D., WRU, 1911; Instructor in Medicine, WRU, 1921-28; Senior Clinical Instructor, 1928-35; Assistant Clinical Professor, 1935-

1935- Randall Leslie Thompson, B.S., Univ. of Washington, 1927; M.S., 1928; D.Sc., Johns Hopkins Univ., 1931; M.D., Univ. of Chicago, 1940; Instructor in Bacteriology, WRU, 1931-33, Senior Instructor, 1933-34; Assistant Professor, 1935-

1935-39 Theodore Thomas Zuck, A.B., Adelbert Coll., 1924; M.D., WRU, 1928; Instructor in Anatomy, WRU, 1929-34; Senior Instructor, 1934-35; Assistant Professor, 1935-39.

1936-37 Harold Hixon Brittingham, A.B., Yale Univ., 1916; M.D., Harvard Univ., 1920; Demonstrator in Physiology, WRU, 1922-23; Demonstrator in Medicine, 1924-34; Senior Clinical Instructor, 1934-36; Assistant Clinical Professor, 1936-37.

1936-44 Charles Theopilus Dolezal, A.B., Oberlin Coll., 1920; M.D., WRU, 1926; Instructor in Medicine, WRU, 1929-34; Senior Instructor, 1934-36; Assistant Clinical Professor, 1936-44.

1936-42 Walter Elmer Hambourger, B.S., Case School of Applied Science, 1928; Ph.D., WRU, 1931; Instructor in Pharmacology, Yale Univ., 1932-36; Assistant Professor of Pharmacology, WRU, 1936-42.

1936-39 Franklin Rush Miller, B.S., Illinois Wesleyan Coll., 1923; M.D., Harvard Univ., 1927; Demonstrator in Medicine, WRU, 1931-33; Instructor, 1933-34; Senior Instructor, 1934-36; Assistant Professor, 1936-39.

1937- George I. Baumann, M.D., WRU, 1903; Demonstrator in Surgery, WRU, 1915-19; Instructor in Orthopedic Surgery, 1919-23; Associate, 1923-27; Assistant Clinical Professor, 1937-

1937-38 Harold Melborn Dixon, A.B., Univ. of Kansas, 1927; M.D., 1930; Instructor in Pathology, Univ. of Pennsylvania, 1932-37; Assistant Professor of Pathology, WRU, 1937-38.

1938- Edward Harvey Cushing, A.B., Yale Univ., 1919; M.D., Harvard Univ., 1923; Instructor in Medicine, Columbia Univ., 1926-27; Clinical Instructor in Medicine, WRU, 1928-33; Senior Clinical Instructor, 1933-38; Assistant Clinical Professor, 1938-

1938- Robert Lee Faulkner, B.S., Allegheny Coll., 1919; M.D., Johns Hopkins Univ., 1923; Demonstrator in Gynecology, WRU, 1929-33; Clinical Instructor, 1933-36; Senior Clinical Instructor, 1936-38; Assistant Professor, 1938-

1938- Harry Hauser, A.B., Univ. of Texas, 1926; M.D., 1929; Instructor in Roentgenology, WRU, 1934-36; Senior Instructor, 1936-38; Assistant Professor, 1938-

1938- William Cole McCally, A.B., West Virginia Wesleyan Coll., 1919; M.D., WRU, 1923; Demonstrator in Histology and Embryology, WRU, 1926-28; Demonstrator in Anatomy, 1928-30; Demonstrator in Surgery, 1930-33; Clinical Instructor, 1933-35; Senior Clinical Instructor, 1935-38; Assistant Clinical Professor, 1938-

1938- Paul Guthrie Moore, A.B., Miami Univ., 1905; A.M., 1906; M.D., WRU, 1910; Demonstrator in Ophthalmology, WRU, 1930-33; Instructor, 1933-35; Clinical Instructor, 1935-38; Assistant Clinical Professor, 1938-

1938- Michael Paul Motto, M.D., Ohio State Univ., 1913; Demonstrator in Ophthalmology, New York Post-Graduate Medical School, 1920; Instructor, 1920-22; Associate, 1922; Demonstrator in Ophthalmology, WRU, 1923-25; Instructor, 1925-30; Senior Instructor, 1930-34; Senior Clinical Instructor, 1934-38; Assistant Clinical Professor, 1938-

1938- Harley Arthur Williams, A.B., Oberlin Coll., 1923; A.M., 1925; M.D., WRU, 1929; Demonstrator in Medicine, WRU, 1931-34; Clinical Instructor, 1934-37; Senior Clinical Instructor, 1937-38; Assistant Clinical Professor, 1938-

1939- William Clark Barrett, Jr., B.S., Univ. of Virginia, 1929; M.S., 1930; Ph.D., Harvard Univ., 1934; Instructor in Histology and Embryology, WRU, 1935-37; Senior Instructor, 1937-39; Assistant Professor, 1939-

1939- Joseph Fetterman, A.B., Adelbert Coll., 1918; M.D., WRU, 1921; A.M., 1927; Demonstrator in Nervous Diseases, WRU, 1924-30; Clinical Instructor, 1930-37; Senior Clinical Instructor, 1937-39; Assistant Clinical Professor, 1939-

1939- Otto Louis Goehle, A.B., Cornell Univ., 1902; M.D., 1905; Demonstrator in Anatomy, Cornell Univ., 1905-06; Demonstrator in Pediatrics, WRU, 1912-13; Instructor, 1913-19; Associate, 1919-27; Senior Clinical Instructor, 1927-39; Assistant Clinical Professor, 1939-

1939- Walter Heyman, M.D., Univ. of Kiel, 1923; Senior Clinical Instructor in Pediatrics, WRU, 1937-39; Assistant Clinical Professor, 1939-

1939- William Bechman Wartman, B.S., Univ. of Pennsylvania, 1929; M.D., 1932; Demonstrator in Pathology, WRU, 1936-37; Instructor, 1937-38; Senior Instructor, 1938-39; Assistant Professor, 1939-

1940-42 David Bodian, B.S., Univ. of Chicago, 1931; Ph.D., 1934; M.D., 1937; Assistant Professor of Anatomy, WRU, 1940-42.

1940- Roger Olaf Egeberg, A.B., Cornell Univ., 1926; M.D., Northwestern Univ., 1929; Instructor, Univ. of Michigan, 1930-32; Demonstrator in Medicine, WRU, 1932-36; Clinical Instructor, 1936-38; Senior Clinical Instructor, 1938-40; Assistant Clinical Professor, 1940-

1940- Roscoe David Leas, A.B., Ohio Wesleyan Univ., 1916; M.D., WRU, 1922; Demonstrator in Medicine, WRU, 1925-27; Instructor, 1927-36; Clinical Instructor, 1936-37; Senior Clinical Instructor, 1937-40; Assistant Clinical Professor, 1940-

1940- Joseph Edgar McClelland, A.B., Coll. of Wooster, 1908; M.D., WRU, 1912; Demonstrator in Pediatrics, WRU, 1915-17, 1924-26; Instructor, 1917-22; Clinical Instructor, 1926-33; Senior Clinical Instructor, 1933-40; Assistant Clinical Professor, 1940-

1940- Floyd Samuel Mowry, A.B., Adelbert Coll., 1913; M.D., WRU, 1916; Demonstrator in Obstetrics, WRU, 1917-21; Instructor, 1921-27; Clinical Instructor, 1927-34; Senior Clinical Instructor, 1934-40; Assistant Clinical Professor, 1940-

1940- Donald Jacob Rehbock, B.S., Univ. of Washington, 1926; M.D., Univ. of Pennsylvania, 1930; Demonstrator in Pathology, WRU, 1933-35; Instructor, 1935-37; Senior Instructor, 1937-40; Assistant Professor, 1940-

1940- Ernst Albert Scharrer, Ph.D., Univ. of Munich, 1927; M.D., 1933; Assistant Professor of Anatomy, WRU, 1940-

1940- Robert Morgan Stecher, B.S., Dartmouth Coll., 1919; M.D., Harvard Univ., 1923; Clinical Instructor in Medicine, WRU, 1934-36; Senior Clinical Instructor, 1936-40; Assistant Clinical Professor, 1940-

1941- Fred Willis Dixon, B.S., Geneva Coll., 1912; M.D., Univ. of Pennsylvania, 1917; Demonstrator in Otolaryngology, WRU, 1932-36; Clinical Instructor, 1936-38; Senior Clinical Instructor, 1938-41; Assistant Clinical Professor, 1941-

1941- Ralph Isadore Dorfman, B.S., Univ. of Illinois, 1932; Ph.D., Univ. of Chicago, 1934; Instructor in Pharmacology, Louisiana State Univ., 1935-36; Instructor in Physiological Chemistry, Yale Univ., 1936-39; Assistant Professor, 1939-41; Assistant Professor of Biochemistry, WRU, 1941-

1941- Curtis Ferbert Garvin, A.B., Adelbert Coll., 1929; M.D., WRU, 1932; Instructor in Medicine, WRU, 1936-39; Senior Instructor, 1939-41; Assistant Professor, 1941-

1941- Albert Sidney Harris, B.S., Univ. of Alabama, 1930; Ph.D., Washington Univ., 1934; Instructor in Physiology and Pharmacology, Univ. of Alabama, 1934-35; Assistant Professor, 1935-37; Senior Instructor in Physiology, WRU, 1939-41; Assistant Professor, 1941-

1941- Clarence Henry Heyman, B.S., Heidelberg Coll., 1911; M.D., Harvard Univ., 1916; Demonstrator in Orthopedic Surgery, WRU, 1926-27; Clinical Instructor, 1927-34; Senior Clinical Instructor, 1934-41; Assistant Clinical Professor, 1941-

1941- Clarence Cecil Roe Jackson, M.D., Jefferson Medical Coll., 1928; M.S., Univ. of Pennsylvania, 1936; D.Sc., 1938; Instructor in Otolaryngology, WRU, 1935-40; Senior Instructor, 1940-41; Assistant Clinical Professor, 1941-

1941-44 Joseph Seifter, M.D., Emory Univ., 1934; Instructor in Pharmacology, Univ. of Oklahoma, 1935-37; Instructor in Pharmacology, WRU, 1937-39; Senior Instructor, 1939-41; Assistant Professor, 1941-44.

1941- Reginald Alden Shipley, A.B., Otterbein Coll., 1927; M.D., WRU, 1931; Instructor in Medicine, WRU, 1938-40; Senior Instructor, 1940-41; Assistant Professor, 1941-

1941- Charles Thomas Way, B.S., Beloit Coll., 1914; M.D., WRU, 1921; Demonstrator in Biochemistry, WRU, 1923-25; Instructor, 1925-40; Senior Instructor, 1940-41; Clinical Instructor in Medicine, 1933-40; Senior Clinical Instructor, 1940-41; Assistant Clinical Professor, 1941-

1942- Hans Hirschmann, M.D., Univ. of Basel, 1934; Ph.D., Columbia Univ., 1938; Assistant Professor of Biochemistry, Univ. of Pennsylvania, 1942; Assistant Professor of Biochemistry, WRU, 1942-

1942-43 Darlington Frank Holtman, A.B., Univ. of Kansas, 1921; A.M., Univ. of Tennessee, 1930; Ph.D., Ohio State Univ., 1937; Instructor in Bacteriology, Univ. of Tennessee, 1929-32; Associate Professor, 1940-41; Instructor in Bacteriology, Ohio State Univ., 1936-42; Instructor in Bacteriology, WRU, 1942; Assistant Professor, 1942-43.

1942- Herbert Zachareus Lund, M.D., Univ. of Pennsylvania, 1931; Senior Instructor in Pathology, WRU, 1941-42; Assistant Professor, 1942-

1942- Jeannette Brown Obenchain, Ph.B., Univ. of Chicago, 1906; Ph.D., 1924; Associate in Neuro-anatomy, WRU, 1939-42; Assistant Professor, 1942-

1942- Richard Edgar Stout, A.B., Indiana Univ., 1927; M.D., 1930; Demonstrator in Nervous Diseases, WRU, 1932-37; Clinical Instructor, 1937-40; Senior Clinical Instructor, 1940-42; Assistant Clinical Professor, 1942-

1942-43 Harold Carl Wiggers, A.B., Wesleyan Univ., 1932; Ph.D., WRU,

1936; Instructor in Physiology, Columbia Univ., 1937-42; Assistant Professor of Physiology, WRU, 1942-43.

1943- William Matthew Champion, A.B., Adelbert Coll., 1916; M.D., WRU, 1919; Demonstrator in Pediatrics, WRU, 1921-22; Instructor, 1922-26; Clinical Instructor, 1926-30; Senior Clinical Instructor, 1930-43; Assistant Clinical Professor, 1943-

1943- Clarence William Engler, A.B., Adelbert Coll., 1916; M.D., WRU, 1919; Demonstrator in Otolaryngology, WRU, 1923-24, 1933-40; Clinical Instructor, 1940-41; Senior Clinical Instructor, 1941-43; Assistant Clinical Professor, 1943-

1943- Alfred Henry Free, A.B., Miami Univ., 1934; M.S., WRU, 1936; Ph.D., 1939; Instructor in Biochemistry, WRU, 1939-41; Senior Instructor, 1941-43; Assistant Professor, 1943-

1943- Simon Koletsky, A.B., Yale Univ., 1930; M.D., 1934; Demonstrator in Pathology, WRU, 1938-39; Instructor, 1939-41; Senior Instructor, 1941-43; Assistant Professor, 1943-

1943- Frederick Robert Mautz, B.S., Case School of Applied Science, 1929; M.D., WRU, 1933; Demonstrator in Histology, WRU, 1938-39; Instructor in Surgery, 1938-41; Senior Instructor, 1941-43; Assistant Professor, 1943-

g. Lecturers

1870-71 William Henry Palmer, A.B., Yale Coll., 1864; M.D., Coll. of Physicians and Surgeons of New York City, 1867; Lecturer in Ophthalmology, WRC, 1870-71.

1871-74 Eben J. Cutler, A.B., Baldwin Coll., 1860; M.D., WRC, 1866; Demonstrator in Anatomy, WRC, 1871-72; Lecturer in Surgical Anatomy, 1871-74.

1872-73 William Whiting Andrews, A.B., WRC, 1859; Lecturer in Medical Jurisprudence, WRC, 1872-73.

1879-80 John F. Isom, M.D., WRC, 1877; Adjunct Lecturer in Principles and Practice of Medicine, 1879-80.

1880-81 Charles Frederic Dutton, M.D., Bellevue Hospital Medical Coll., 1864; Adjunct Lecturer in Principles and Practice of Medicine, WRC, 1880-81.

1880-81 Pascal Hall Sawyer, M.D., WRC, 1858; Lecturer in Diseases of the Skin, WRC, 1880-81.

1888-89 Albert William Smith, Ph.C., Univ. of Michigan, 1885; B.S., Case School of Applied Science, 1887; Ph.D., Univ. of Zurich, 1891; Lecturer in Chemistry, WRU, 1888-89.

1893-93 Samuel Walter Kelley, M.D., WRU, 1884; Assistant in Diseases of Children, WRU, 1887-93; Clinical Lecturer in Diseases of Children, WRU, 1893-93.

1893-96 George Clark Russell, A.B., WRC, 1877; M.D., WU, 1880; Adjunct Professor of Physiology and Histology, WU, 1887-88; Lecturer in Materia Medica and Therapeutics, WRU, 1893-96.

1893-95 Howard Seymour Straight, A.B. (Hon.), Adelbert Coll., 1888; M.D., WRU, 1885; Assistant in Pathology, WRU, 1888-92; Assistant in

Diseases of Throat and Chest, 1889-93; Lecturer in Physical Diagnosis, 1893-95; Lecturer in Otology, Rhinology and Laryngology, 1893-95.

1894-95 Frederick Kinsman Smith, A.B., WRC, 1879; M.D., Univ. of Michigan, 1883; Lecturer in Materia Medica, WRU, 1894-95.

1894-96 Rell M. Woodward, M.D., Miami Medical Coll., 1887; Lecturer in Clinical Surgery, WRU, 1894-96.

1907-09 Frank S. Clark, A.B., Oberlin Coll., 1887; A.M., 1890; M.D., WRU, 1890; Assistant in Obstetrics and Pediatrics, WRU, 1897-1903; Demonstrator in Obstetrics, 1903-07; Lecturer, 1907-09.

1908-09 Maulsby Willett Blackman, A.B., Univ. of Kansas, 1901; A.M., 1902; Ph.D., Harvard Univ., 1905; Instructor in Zoology and Histology, Univ. of Kansas, 1901-04; Instructor in Histology, Comparative Anatomy and Embryology, WRU, 1905-06; Instructor in Histology and Embryology, 1906-07; Lecturer, 1907-09.

h. Associates

This title was first used in 1911. Its significance was changed in 1929.

1911-16 Walter Henry Merriam, Ph.B., Univ. of Vermont, 1889; M.D., Cleveland Univ. of Medicine and Surgery, 1895; M.D., WRU, 1898; Demonstrator in Medicine, WRU, 1900-07; Instructor, 1907-11, Associate, 1911-16.

1912-14 Charles Herman Clark, M.D., Starling Medical Coll., 1893; Lecturer in Mental Diseases, WRU, 1910-12; Associate, 1912-14.

1912-14 John Franklin Davidson, M.D., Miami Medical Coll., 1887; Lecturer in Anatomy, OWU, 1906-07; Associate Professor, 1907-09; Professor, 1909-10; Lecturer in Anatomy, WRU, 1910-12; Associate, 1912-14.

1912-14 Harry Bertolette Kurtz, M.D., WRU, 1893; Instructor in Dermatology and Venereal Disease, OWU, 1905-07; Lecturer, 1907-08; Associate Professor, 1908-09; Professor, 1909-10; Lecturer in Dermatology, WRU, 1910-12; Associate, 1912-14.

1912-18 Edward Lauder, M.D., C.M., McGill Univ., 1896; Assistant in Ophthalmology, OWU, 1898-1901; Lecture in Otolaryngology and Ophthalmology, 1901-04; Lecturer in Ophthalmology, 1904-07; Associate Professor, 1907-10; Instructor in Ophthalmology, WRU, 1910-12; Associate, 1912-18.

1912-18 Ralph Kinsey Updegraff, M.D., OWU, 1902; Assistant in Medicine, OWU, 1903-04; Instructor in Physical Diagnosis, 1904-06; Lecturer, 1906-09; Associate Professor, 1909-10; Instructor in Physical Diagnosis, WRU, 1910-12; Associate, 1912-18.

1914-20 Richard Dexter, A.B., Harvard Univ., 1901; M.D., 1905; Assistant in Medicine, Harvard Univ., 1907-08; Demonstrator in Medicine, WRU, 1909-12; Instructor, 1912-14; Associate, 1914-20.

1915-21 Harold Oliver Ruh, A.B., Univ. of Indiana, 1907; M.D., WRU, 1910; Demonstrator in Pathology, WRU, 1911-13; Instructor in Pediatrics, 1913-15; Associate, 1915-21.

1915-20 Harry Roswell Wahl, A.B., Univ. of Wisconsin, 1908; A.M., 1910; M.D., Johns Hopkins Univ., 1912; Assistant in Anatomy, Univ.

of Wisconsin, 1908-10; Instructor in Pathology, WRU, 1913-15; Associate, 1915-20.

1916-19 Arthur Bradley Eisenbrey, Ph.B., Adelbert Coll., 1903; M.D., WRU, 1906; Associate in Medicine, Univ. of Pennsylvania, 1910-11; Instructor in Surgery, Columbia Univ., 1911-16; Associate in Pathology, WRU, 1916-19.

1919-20, 1929-44 Richard Arthur Bolt, A.B., Univ. of Michigan, 1904; M.D., 1906; D.P.H., Univ. of California, 1924; D.P.H., Johns Hopkins Univ., 1925; Instructor in Pediatrics, WRU, 1917-19; Associate in Pediatrics, 1919-20; Associate in Hygiene, Preventive Medicine and Pediatrics, 1929-44.

1920-23 Guthrie McConnell, M.D., Univ. of Pennsylvania, 1896; Demonstrator in Pathology, Medico-Chirurgical Medical Coll., 1903-05; Professor of Pathology and Bacteriology, Temple Medical School, 1910-13; Associate in Pathology, WRU, 1920-23.

1924-26 Harvey Shepard Thatcher, A.B., Ohio State Univ., 1909; M.D., Rush Medical Coll., 1917; Instructor in Medicine, Columbia Univ., 1921-24; Associate in Pathology, WRU, 1924-26.

1929- Clarence Millard Finfrock, A.B., Ohio Wesleyan Univ., 1902; A.M., 1907; LL.B., WRU, 1907; Lecturer in Medical Jurisprudence, WRU, 1920-29; Associate, 1929-

1930- Howard Whipple Green, A.B., Clark Univ., 1914; B.S., Massachusetts Institute of Technology, 1916; B.S., Harvard Univ., 1916; Demonstrator in Health Administration, WRU, 1928-30; Associate, 1930-

1930- Harold Jennings Knapp, A.B., 1911 WRU; M.D., 1919; Demonstrator in Hygiene, WRU, 1920-30; Associate in Health Administration, 1930-

1932- Rafael Dominguez, M.D., National Univ. of Colombia, 1915; Demonstrator in Pathology, WRU, 1921-23; in Experimental Medicine, 1923-24; Instructor, 1924-27; Associate in Pathology, 1932-

1933- Henry Cyril Schumacher, B.S., St. Louis Univ., 1917; M.D., 1919; Associate in Pediatrics, WRU, 1933-

1938-41 Howard Coke Stewart, M.D., Univ. of Nebraska, 1920; D.P.H., Johns Hopkins Univ., 1931; Associate in Public Health Administration, WRU, 1938-41.

1941- Bruno Gebhard, M.D., Univ. of Rostock, 1925; Associate in Health Education, WRU, 1941-

1942-44 William Montague Cobb, A.B., Amherst Coll., 1925; M.D., Howard Univ., 1929; Ph.D., WRU, 1932; Associate in Anatomy, WRU, 1942-44

1942- Arthur William Thomas, M.D., Ohio State Univ., 1914; Associate in Pediatrics, WRU, 1942-

1943- Vernon Cecil Rowland, B.S., Ohio Wesleyan Univ., 1903; A.M., 1909; M.D., WRU, 1909; Assistant in Medicine, WRU, 1911-12; Demonstrator, 1912-13; Instructor, 1913-21; Associate in Preventive Medicine, 1943-

i. Senior Instructors

1923-32 Ernest Walter Garrett, A.B., Adelbert Coll., 1907; M.D., WRU,

1912; Demonstrator in Otolaryngology, 1919-21; Instructor, 1921-23; Senior Instructor, 1923-27; Senior Clinical Instructor, 1927-32.

1925-37 Lemuel Ruevell Brigman, Ph.B., Kenyon Coll., 1909; M.D., WRU, 1914; Demonstrator in Pediatrics, WRU, 1918-19; Instructor, 1919-25; Senior Instructor, 1925-27; Senior Clinical Instructor, 1927-37.

1925-26, 1927-44 Howard Dittrick, M.B., Univ. of Toronto, 1900; M.D. 1927; Demonstrator in Gynecology, WRU, 1904-15; Instructor, 1915-25; Senior Clinical Instructor, 1925-44.

1925-27 Theodore Sessinghaus Eliot, A.B., Reed Coll., 1921; A.M., Univ. of Kansas, 1922; Ph.D., Univ. of Chicago, 1925; Senior Instructor in Histology and Embryology, WRU, 1925-27.

1927-29 Mario Garcia Banus, A.B., Instituto de Sn. Isidro, 1909; M.S., Univ. of Madrid, 1914; D.Sc., 1915; Instructor in Physiology, Yale Univ., 1919-20; Demonstrator in Physiology, WRU, 1924-25; Instructor, 1925-27; Senior Instructor, 1927-29

1928- William Dixon Fullerton, Ph.B., Yale Univ., 1907; M.D., Johns Hopkins Univ., 1911; Demonstrator in Obstetrics and Gynecology, WRU, 1914-20; Demonstrator in Ophthalmology, 1920-21; Instructor in Obstetrics and Gynecology, 1921-22; Instructor in Gynecology, 1922-28; Senior Instructor, 1928-29; Senior Clinical Instructor, 1929-

1928-31 Ralph Heinrich Heeren, B.S., Iowa State College, 1924; A.M., 1929; Ph.D., 1931, WRU; M.D., Univ. of Iowa, 1934; Instructor in Hygiene and Preventive Medicine, Univ. of Iowa, 1924-26; Instructor in Bacteriology, WRU, 1926-28; Senior Instructor, 1928-31.

1928-30 Frank Riecker Lyne, A.B., Marietta Coll., 1917; M.D., WRU, 1922; Demonstrator in Pathology, WRU, 1923-25; Instructor in Clinical Pathology, 1925-27; Clinical Instructor, 1927-28; Senior Instructor, 1928-30.

1928- Charles Lounsbury Ruggles, A.B., Adelbert Coll.,1910; M.D., WRU, 1913; Demonstrator in Pediatrics, WRU, 1920-22; Instructor, 1922-26; Clinical Instructor, 1926-28; Senior Clinical Instructor, 1928-

1929-31 La Verne Almon Barnes, Ph.D., Washington State Coll., 1929; Demonstrator in Bacteriology, WRU, 1925-26; Senior Instructor, 1929-31.

1929-31 Forrest Draper McCrea, B.S., Purdue Univ., 1918; M.S., University of Illinois, 1923; Ph.D., Univ. of Wisconsin, 1927; Instructor in Physiology, Univ. of Wisconsin, 1923-27; Assistant Professor of Physiology and Pharmacology, Univ. of Georgia, 1927-29; Senior Instructor in Physiology, WRU, 1929-31.

1929- Oliver Arkenburgh Weber, A.B., Adelbert Coll., 1902; M.D., WRU, 1905; Demonstrator in Anatomy, WRU, 1907-14, 1918-22; Associate in Clinical Anatomy, 1922-29; Senior Instructor, 1929-40; Demonstrator in Surgery, 1911-14; Instructor, 1914-26; Clinical Instructor, 1926-30; Senior Clinical Instructor, 1930-

1930- James Edward Hallisy, A.B., St. Ignatius Coll., 1914; M.D., WRU, 1918; Demonstrator in Anatomy, 1920-25; Instructor, 1925-30; Senior Instructor, 1930- ; Demonstrator in Surgery, 1928-29; Clinical Instructor, 1929-33; Senior Clinical Instructor, 1933-

1930- Joyce Ian Hartman, A.B., Adelbert Coll., 1919; M.D., WRU, 1923; Instructor in Pediatrics, WRU, 1928-30, Senior Instructor, 1930-31; Senior Clinical Instructor, 1931-

1930- James William Mull, B.S., Knox Coll., 1918; A.M., Harvard Univ., 1923; Ph.D., Univ. of Iowa, 1927; Senior Instructor in Biochemistry, WRU, 1930-

1931- Lawrence Alson Pomeroy, A.B., Yale Univ., 1905; M.D., WRU, 1908; Senior Clinical Instructor in Gynecology, WRU, 1931- ; Senior Instructor in Radium Therapy, 1935-

1933-39, 1942- John Hart Davis, A.B., Adelbert Coll., 1912; M.D., WRU, 1918; Demonstrator in Pediatrics, WRU, 1921-22; Clinical Instructor, 1926-33;Senior Clinical Instructor, 1933-39, 1942-

1933-40 Wilhelmine Kuenzel, A.B., Oberlin Coll., 1922; A.M., WRU, 1928; Instructor in Anatomy, WRU, 1928-33; Senior Instructor, 1933-40.

1933- John Darlington Nourse, B.S., Ohio Wesleyan Univ., 1913; M.D., WRU, 1916; Clinical Instructor in Pediatrics, WRU, 1927-33; Senior Clinical Instructor, 1933-

1933- Harry Robert Trattner, A.B., Univ. of Colorado, 1916; M.D., WRU, 1919; A.M., 1923; Demonstrator in Surgery, WRU, 1921-23; 1924-29; in Genito-Urinary Surgery, 1929-30; Clinical Instructor, 1930-33; Senior Clinical Instructor, 1933-

1933- Charles Henry York, B.S., Case School of Applied Science, 1921; M.D., WRU, 1925; Senior Clinical Instructor in Pediatrics, WRU, 1933-

1934- Francis Bayless, B.S., Univ. of Indiana, 1927; M.D., 1929; Instructor in Pathology, WRU, 1933-34; Senior Instructor, 1934-

1934- Frank Scott Gibson, B.S., Mt. Union Coll., 1915; M.D., WRU, 1916; Demonstrator in Surgery, WRU, 1919-21; Instructor, 1921-24, 1925-27; Clinical Instructor, 1927-34; Senior Clinical Instructor, 1934-

1934-36 Robert Charles Hahn, A.B., Adelbert Coll., 1928; M.D., WRU, 1931; Instructor in Bacteriology, WRU, 1932-34; Senior Instructor, 1934-36.

1934-35 Henry Carlisle Shaw, B.S., Univ. of North Carolina, 1925; M.D., Washington Univ., 1929; Demonstrator in Dermatology and Syphilology, WRU, 1932-33; Instructor, 1933-34; Senior Instructor, 1934-35.

1934-35 Tom Douglas Spies, A.B., Univ. of Texas, 1923; M.D., Harvard Univ., 1927; Instructor in Medicine, WRU, 1933-34; Senior Instructor, 1934-35.

1935- Carl C. Francis, A.B., Bethany Coll., 1923; M.D., WRU, 1930; Demonstrator in Anatomy, WRU, 1930-31; Instructor, 1932-35; Senior Instructor, 1935-

1935- Anna May Young, A.B., Flora Stone Mather Coll., 1923; M.D., WRU, 1926; Demonstrator in Pathology, WRU, 1928-33; Instructor, 1933-35; Senior Instructor, 1935-

1936-38 Albert Joseph Dalton, A.B., Wesleyan Univ., 1927; A.M., Harvard Univ., 1929; Ph.D., 1934; Instructor in Histology and Embryology, WRU, 1934-36; Senior Instructor, 1936-38.

1936- Charles Frederick Good, A.B., Heidelberg Univ., 1923; M.D., WRU, 1927; Instructor in Pediatrics, WRU, 1934-36; Senior Clinical Instructor, 1936-

1936- Albert Aloysius Hill, A.B., John Carroll Univ., 1919; B.S., 1921; M.D., St. Louis Univ., 1927; Clinical Instructor in Medicine, WRU, 1934-36; Senior Clinical Instructor, 1936-

1936- Harry James Lefkowitz, A.B., Univ. of Texas, 1924; M.D., Johns Hopkins Univ., 1928; Clinical Instructor in Pediatrics, WRU, 1933-36; Senior Clinical Instructor, 1936-

1936- Wheeler Harold Odell, A.B., Adelbert Coll., 1919; M.D., WRU, 1922; Demonstrator in Anatomy, WRU, 1925-44; Demonstrator in Surgery, 1930-33; Clinical Instructor, 1933-36; Senior Clinical Instructor, 1936-

1936-37 Julius Jay Selman, A.B., Adelbert Coll., 1914; M.D., WRU, 1917; Demonstrator in Medicine, WRU, 1918-22, 1927-34; Clinical Instructor, 1934-36; Senior Clinical Instructor, 1936-37.

1936-38 Morris Arthur Simon, A.B., Adelbert Coll., 1925; M.D., WRU, 1931; Demonstrator in Pathology, WRU, 1932-34; Instructor, 1934-36; Senior Instructor, 1936-38.

1936- Leonard Gerard Steuer, A.B., Harvard Univ., 1920; M.D., WRU, 1923; Demonstrator in Medicine, WRU, 1931-34; Clinical Instructor, 1934-36; Senior Clinical Instructor, 1936-

1937-42 Albert Theodore Steegmann, B.S., Univ. of Kansas, 1926; M.D., 1928; Demonstrator in Nervous Diseases, WRU, 1930-32; Clinical Instructor, 1933-37; Senior Clinical Instructor, 1937-42; Senior Clinical Instructor in Neuro-Pathology, 1937-42; Demonstrator in Neuro-Anatomy, 1939-41.

1938- Edmund Earl Beard, A.B., Adelbert Coll., 1919; M.D., WRU, 1922; Demonstrator in Medicine, WRU, 1924-25, 1927-33, 1935-36; Clinical Instructor, 1936-38; Senior Clinical Instructor, 1938-

1938- Ralph Llewellyn Cox, A.B., Adelbert Coll., 1924; M.D., WRU, 1927; Demonstrator in Medicine, WRU, 1935-36; Clinical Instructor, 1936-38; Senior Clinical Instructor, 1938-

1938-40 Josephine Koob Dirion, M.D., Ohio State Univ., 1930; M.S., Univ. of Pennsylvania, 1932; Demonstrator in Ophthalmology, WRU, 1932-34; Instructor, 1934-35; Clinical Instructor, 1935-38; Senior Clinical Instructor, 1938-40.

1938- John Ellwood Leonard Keyes, M.B., Univ. of Toronto, 1908; M.D., 1928; Demonstrator in Ophthalmology, WRU, 1933-34; Instructor in Ophthalmic Pathology, 1934-35; Clinical Instructor, 1935-38; Senior Clinical Instructor, 1938-

1938-42 Samuel Connell Lindsay, M.D., WRU, 1893; Demonstrator in Nervous Diseases, WRU, 1921-30; Clinical Instructor, 1930-38; Senior Clinical Instructor, 1938-42.

1938-40 Leonard Robert Ravitz, M.D., OWU, 1911; Assistant in Nervous Diseases, WRU, 1912-16; Demonstrator, 1920-27; Clinical Instructor, 1927-38; Senior Clinical Instructor, 1938-40.

1938-41 James Vane Seids, B.S., Univ. of Wisconsin, 1917; M.D., WRU, 1920; Demonstrator in Anatomy, WRU, 1924-34; in Surgery, 1932-35; Instructor, 1935-37; Clinical Instructor, 1937-38; Senior Clinical Instructor, 1938-41.

1938- Mortimer Lee Siegel, A.B., Adelbert Coll., 1919; M.D., WRU, 1922; Demonstrator in Medicine, WRU, 1935-36; Clinical Instructor, 1936-38; Senior Clinical Instructor, 1938-

1938- Hiram Orville Studley, A.B., Univ. of Nebraska, 1920; M.D., Harvard Univ., 1924; Demonstrator in Surgery, WRU, 1928-36; Clinical Instructor, 1936-38; Senior Clinical Instructor, 1938-

1938-43 Ivan Ford Weidlein, B.S., Univ. of Iowa, 1922; M.D., 1922; Demonstrator in Surgery, WRU, 1923-24; in Otolaryngology, 1927-29; Clinical Instructor, 1929-38; Senior Clinical Instructor, 1938-43.

1939-40 Philip Dow, B.S., Univ. of Michigan, 1927; Ph.D., Yale Univ. 1935; Instructor in Physiology, Univ. of Georgia, 1936-39; Senior Instructor in Physiology, WRU, 1939-40.

1939-42 George Herbert Hitchings, B.S., Univ. of Washington, 1927; M.S., 1928; Ph.D., Harvard Univ., 1933; Instructor in Biochemistry, Harvard Univ., 1934-37; Associate in Physiology, 1937-39; Senior Instructor in Biochemistry, WRU, 1939-42.

1939- John Henry Lazzari, B.S., Ohio Wesleyan Univ., 1927; M.D., WRU, 1931; Demonstrator in Surgery, WRU, 1934-35; Instructor, 1935-37; Clinical Instructor, 1937-39; Senior Clinical Instructor, 1939-

1939- Wilmot Frederick Schneider, A.B., Cornell Univ., 1926; M.D., WRU, 1930; Clinical Instructor in Pediatrics, WRU, 1937-39; Senior Clinical Instructor, 1939-

1939- Carl Farnan Ulrich, B.S., Baldwin-Wallace Coll., 1914; M.D., WRU, 1918; Demonstrator in Clinical Pathology, WRU, 1918-19, 1920-23; in Pediatrics, 1929-33; Clinical Instructor, 1933-39; Senior Clinical Instructor, 1939-

1939- Carl Edward Zeithaml, A.B., Adelbert Coll., 1927; M.D., WRU, 1930; Clinical Instructor in Pediatrics, WRU, 1937-39; Senior Clinical Instructor, 1939-

1940- George W. Binkley, A.B., Hiram Coll., 1927; M.D., WRU, 1930; Demonstrator in Dermatology and Syphilology, WRU, 1935-36; Instructor, 1936-40; Senior Instructor, 1940-

1940- Lorand Victor Johnson, B.S., Huron Coll., 1926; A.M., Boston Univ., 1931; M.D., 1934; Instructor in Ophthalmology, WRU, 1937-40; Senior Instructor, 1940-

1940- Charles Gerald LaRocco, M.D., Ohio State Univ., 1912; Demonstrator in Dermatology and Syphilology, WRU, 1925-27; Instructor, 1933-35; Clinical Instructor, 1935-40; Senior Clinical Instructor, 1940-

1940- Jacob Waide Price, B.S., Butler Univ., 1928; A.M., Univ. of Cincinnati, 1929; Ph.D., 1931; Senior Instructor in Medicine, WRU, 1940-

1940- Sidney Elmer Wolpaw, A.B., Adelbert Coll., 1927; M.D., WRU, 1930; Demonstrator in Medicine, WRU, 1935-37; Clinical Instructor, 1937-39; Instructor, 1939-40; Senior Instructor, 1940-

1941- Carroll Glenn Barber, M.D., Ohio State Univ., 1920; A.M., WRU, 1930; Demonstrator in Orthopedic Surgery, WRU, 1935-37; Clinical Instructor, 1937-41; Senior Clinical Instructor, 1941-

1941- Edward O'Neil Harper, A.B., Ohio Wesleyan Univ., 1928; M.D., Univ. of Pennsylvania, 1932; Instructor in Psychiatry, Univ. of Pennsylvania, 1936-37; Instructor in Medicine, WRU, 1937-41; Senior Instructor, 1941-

1941- Joseph Ransohoff Kahn, B.S., Univ. of Cincinnati, 1932; B.M., 1935; M.D., 1936; Instructor in Pathology, WRU, 1939-41; Senior Instructor, 1941-

1941- Edwin Paul Kennedy, A.B., Allegheny Coll., 1911; M.D., WRU, 1916; Demonstrator in Obstetrics, WRU, 1921-22, 1923-26; Clinical Instructor, 1926-41; Senior Clinical Instructor, 1941-

1941- Neil Thomas McDermott, A.B., Catholic Univ. of America, 1927; M.D., Harvard Univ., 1932; Instructor in Medicine, WRU, 1937-41; Senior Instructor, 1941-

1941- Wilbert Hersman McGaw, B.S., Coll. of Wooster, 1921; M.D., WRU, 1925; Instructor in Physical Diagnosis, Univ. of West Virginia, 1929-32; Demonstrator in Orthopedic Surgery, WRU, 1934-36; Clinical Instructor, 1936-41; Senior Clinical Instructor, 1941-

1941- Louis Pillemer, B.S., Duke Univ., 1932; Ph.D., WRU, 1938; Demonstrator in Immunology, WRU, 1938-39; Instructor, 1939-41; Senior Instructor, 1941-

1941- Orange Barker Pomeroy, A.B., Adelbert Coll., 1918; M.D., WRU, 1923; Demonstrator in Obstetrics, WRU, 1926-30; Clinical Instructor, 1930-41; Senior Clinical Instructor, 1941-

1941-42 Reuben Straus, A.B., Adelbert Coll., 1929; M.D., WRU, 1932; Demonstrator in Pathology, WRU, 1935-37; Instructor, 1937-41; Senior Instructor, 1941-42.

1941- John Jibb Thornton, A.B., Univ. of North Carolina, 1930; M.D., Harvard Univ., 1934; Instructor in Surgery, WRU, 1939-41; Senior Instructor, 1941-

1941-44 John Lincoln Work, B.S., Purdue Univ., 1930; M.D., Columbia Univ., 1935; Demonstrator in Pathology, WRU, 1938-39; Instructor, 1939-41; Senior Instructor, 1941-44.

1942-45 Charles Morris Blumenfield, A.B., Univ. of Minnesota, 1926; A.M., 1928; Ph.D., 1932; M.D., 1934; Instructor in Anatomy, Univ. of Minnesota, 1927-28; 1929-31; Associate Professor of Anatomy, Univ. of Utah, 1932-38, 1939-40; Instructor in Pathology, WRU, 1940-42; Senior Instructor, 1942-45.

1942- Paul Mitchell Glenn, A.B., Ohio State Univ., 1928; M.D., WRU, 1935; Instructor in Medicine, WRU, 1938-42; Senior Instructor, 1942-

1942- Leona (Van Gorder) Glover, A.B., Wellesley Coll., 1919; M.D., WRU, 1924; Senior Instructor in Anatomy, WRU, 1942-

1942- Robert Walter Heinle, A.B., Adelbert Coll., 1931; M.D., WRU, 1934; Demonstrator in Medicine, WRU, 1937-38; Instructor, 1940-42; Senior Instructor, 1942-

1942- Thomas Charles Laipply, A.B., Adelbert Coll., 1933; M.D., WRU, 1936; Demonstrator in Pathology, WRU, 1939-40; Instructor, 1940-42; Senior Instructor, 1942-

1942- Max Miller, B.S., Yale Univ., 1931; M.D., 1935; Instructor, in Medicine, WRU, 1940-42; Senior Instructor, 1942-

1942- William Benjamin Seymour, A.B., Adelbert Coll., 1932; M.D., WRU, 1935; Demonstrator in Medicine, WRU, 1939-41; Instructor, 1941-42; Senior Instructor, 1942-

1942- Graham Taylor Webster, A.B., Harvard Univ., 1931; M.D., 1935; Instructor in Medicine, WRU, 1940-42: Senior Instructor, 1942-

1943- Huldah Bancroft, A.B., Univ. of Michigan, 1915; A.M., Columbia Univ., 1928; Demonstrator of Biometrics, WRU, 1937-39; Instructor, 1939-43; Senior Instructor, 1943-

1943- Gerard Anthony DeOreo, A.B., Adelbert Coll., 1934; M.D., WRU, 1937; Instructor in Dermatology and Syphilology, 1941-43; Senior Clinical Instructor, 1943-

1943- Arnold Lazarow, B.S., Univ. of Chicago, 1937; Ph.D. and M.D., 1941; Senior Instructor in Anatomy, WRU, 1943-

1943-44 Rudolph Samuel Reich, A.B., Adelbert Coll., 1912; M.D., WRU, 1915; Clinical Instructor in Orthopedic Surgery, WRU, 1937-43; Senior Clinical Instructor, 1943-44.

1943-45 Berta Jeanette Caroline (Vogel) Scharrer, Ph.D., Univ. of Munich, 1930; Senior Instructor in Anatomy, WRU, 1943-45.

1943- Louis Martin Starin, A.B., Univ. of Kansas, 1915, M.D., WRU, 1920; Clinical Instructor in Orthopedic Surgery, WRU, 1937-43; Senior Clinical Instructor, 1943-

1943- Guy Holland Williams, Jr., A.B., Oberlin Coll., 1928; M.D., WRU, 1932; Demonstrator in Anatomy, WRU, 1936-40; Clinical Instructor in Nervous Diseases, 1940-43; Senior Clinical Instructor, 1943-

1943- John Eli Williams, A.B., Ohio Univ., 1930; M.D., Univ. of Michigan, 1933; Demonstrator in Genito-Urinary Surgery, WRU, 1937-39; Instructor, 1939-43; Senior Instructor, 1943-

j. Instructors

1906-07 Edgar Dewight Brown, Ph.G., New York Coll. of Pharmacy, 1898; Phm.D., 1899; M.D., WRU, 1902; Demonstrator in Pharmacology and Materia Medica, WRU, 1904-06; Instructor, 1906-07.

1907-11 John Charles Darby, Ph.B., Adelbert Coll., 1897; M.D., WRU, 1900; Demonstrator in Pathology, WRU, 1901-02; in Medicine, 1903-07; Instructor, 1907-11.

1907-11 William Orrville Osborn, B.Litt., Adelbert Coll., 1890; M.D., Cleveland Homeopathic Medical Coll., 1895; M.D., WRU, 1898; Assistant in Medicine, WRU, 1899-1900; Demonstrator, 1900-07; Instructor, 1907-11.

1907-08 William Whitridge Williams, M.D., Johns Hopkins Univ., 1899; Demonstrator in Pharmacology and Materia Medica, WRU, 1906-07; Instructor, 1907-08.

1910-21 Charles Collins Stuart, A.B., Adelbert Coll., 1887; A.M., 1895; M.D., WRU, 1895; Assistant in Ophthalmology, WRU, 1897-1906; Demonstrator, 1906-10; Instructor, 1910-21.

1910-11 Andrew Robert Warner, A.B., Hamilton Coll., 1899; A.M., 1902; M.D., WRU, 1906; Demonstrator in Physiology, WRU, 1907-10; Instructor, 1910-11.

1913-15 Roy Gentry Pearce, A.B., Wabash Coll., 1908; M.D., WRU, 1912; Demonstrator in Physiology, 1912-13; Instructor, 1913-15.

1913-19 Chauncey Witter Wyckoff, A.B., Ohio Wesleyan Univ., 1904; M.D., WRU, 1908; Demonstrator in Pediatrics, WRU, 1911-13; Instructor, 1913-19.

1914-16 Percy Wells Cobb, B.S., Case School of Applied Science, 1894; M.D., WRU, 1902; Assistant in Otolaryngology, WRU, 1905-07; in Medicine, 1905-09; Demonstrator in Physiology, 1903-05; 1906-07, 1909-13; Instructor, 1914-16.

1914-16 James Edward Cogan, M.D., Jefferson Medical Coll., 1896; Assistant in Ophthalmology, WRU, 1903-11; Demonstrator, 1911-14; Instructor, 1914-16.

1914-20 William Theodore Miller, A.B., Adelbert Coll., 1905; M.D., Harvard Univ., 1908; Demonstrator in Obstetrics, WRU, 1911-14; Instructor, 1914-20.

1914-18 Howard Lester Taylor, A.B., Oberlin Coll., 1906; M.D., Johns Hopkins Univ., 1910; Assistant in Medicine, WRU, 1911-12; Demonstrator, 1912-14; Instructor, 1914-18.

1915-23 Tedrow Sylvester Keyser, A.B., Wittenberg Coll., 1907; M.D., Johns Hopkins Univ., 1911; Instructor in Nervous Diseases, WRU, 1915-23.

1915-16 George Eric Simpson, B.S., Univ. of Illinois, 1913; A.M., WRU, 1915; Demonstrator in Organic and Biochemistry, WRU, 1914-15; Instructor, 1915-16.

1915-24 George Franklin Thomas, Ph.B., Adelbert Coll., 1903; M.D., WRU, 1906; Demonstrator in Roentgenology, WRU, 1912-15; Instructor, 1915-24.

1916- Edward Patrick Monaghan, M.D., OWU, 1902; Demonstrator in Anatomy, OWU, 1903-05; Lecturer in Anatomy, 1905-10; Demonstrator in Anatomy, WRU, 1910-12; in Gynecology, 1912-16; Instructor, 1916-29; Clinical Instructor, 1929-41; Clinical Instructor in Surgery, 1941-

1916-19 Leo Wolfenstein, A.B., Johns Hopkins Univ., 1893; M.D., OWU, 1906; Assistant in Ophthalmology, WRU, 1908-14; Demonstrator, 1914-16; Instructor, 1916-19.

1917-18 William Leland Holt, A.B., Harvard Univ., 1900; M.D., 1905; C.P.H., Massachusetts Institute of Technology, 1914; Instructor in Hygiene, WRU, 1917-18.

1918-20 Ernest Harper Cox, B.S., Wabash Coll., 1901; M.D., WRU, 1905; Assistant in Surgery, WRU, 1909-12; Demonstrator, 1912-18; Instructor, 1918-20.

1918-20 Harry Walter Masenheimer, A.B., St. Johns Coll., 1904; M.D., Johns Hopkins Univ., 1908; Demonstrator in Surgery, WRU, 1912-18; Instructor, 1918-20.

1918-19 Gordon Niles Morrill, M.D., Harvard Univ., 1905; Assistant in Surgery, WRU, 1909-12; Demonstrator, 1912-18; Instructor, 1918-19.

1918-20 Edward Peterka, A.B., Adelbert Coll., 1902; M.D., WRU, 1905; Assistant in Surgery, WRU, 1909-12; Demonstrator, 1912-18; Instructor, 1918-20.

1919-25 Charles Albert Bowers, B.S., Univ. of West Virginia, 1908; M.D., Johns Hopkins Univ., 1912; A.M., WRU, 1918; Instructor in Surgery, WRU, 1919-25.

1919-23 Frederick Sturges Cooper, A.B., Columbia Univ., 1910; M.D., 1912; Demonstrator in Pediatrics, WRU, 1915-19; Instructor, 1919-23.

1919-24 Alfred Samuel Maschke, M.D., OWU, 1897; Instructor in Medicine, WRU, 1919-20; Clinical Instructor, 1920-24.

1919-41 Rudolph John Ochsner, B.S., Univ. of Wisconsin, 1894; M.D., WRU, 1908; Assistant in Medicine, WRU, 1911-16; Demonstrator in Pediatrics, 1916-19; Instructor, 1919-27; Clinical Instructor, 1927-41.

1919-27 Thomas Pollock Shupe, A.B., Wooster Univ., 1907; M.D., WRU, 1911; Assistant in Surgery, WRU, 1912-16; Instructor in Genito-Urinary Surgery, 1919-27.

1920-23 Harvey Alfred Berkes, A.B., Adelbert Coll., 1906; M.D., WRU, 1909; Assistant in Medicine, WRU, 1911-16; Clinical Instructor, 1920-23.

1920-23 Harry Lawrence Hall, M.D., Univ. of Michigan, 1893; A.M., Univ. of Southern California, 1917; Instructor in Chemistry, Univ. of Southern California, 1917-18; Lecturer in Pharmacology, 1918-19; Assistant Professor of Pharmacology and Physiology, 1919-20; Instructor in Physiology, WRU, 1920-23.

1920-30 Harry Vincent Paryzek, A.B., St. Ignatius Coll., 1911; M.D., WRU, 1915; Demonstrator in Medicine, WRU, 1919-20; Instructor, 1920-29; Clinical Instructor, 1929-30.

1921-23 Theron Skeels Jackson, B.S., Buchtel Coll., 1909; M.S., 1910; M.D., WRU, 1913; Demonstrator in Otolaryngology, WRU, 1919-21; Instructor, 1921-23.

1922- William B. Markus, A.B., Adelbert Coll., 1912; M.D., WRU, 1915; Demonstrator in Pediatrics, WRU, 1920-22; Instructor, 1922-26; Clinical Instructor, 1926-

1922-23 Jean Chiron Snyder, A.B., Wellesley Coll., 1918; B.S., Johns Hopkins Univ., 1912; Demonstrator in Hygiene and Bacteriology, WRU, 1920-21; Instructor, 1922-23.

1922-32 Joseph Raymond Thompson, M.D., OWU, 1906; Demonstrator in Pediatrics, WRU, 1921-22; Instructor, 1922-26; Clinical Instructor, 1926-32.

1923-24 Hamilton Rodell Fishback, A.B., Univ. of Illinois, 1912; M.S., Jefferson Medical Coll., 1915; M.D., 1916; D.Sc., 1917; Instructor in Physiological Chemistry, Jefferson Medical Coll., 1912-18; Instructor in Pathology, WRU, 1923-24.

1923-24, 1925-26 Vernon Jersey, A.B., Adelbert Coll., 1920; A.M., 1921; Demonstrator in Biochemistry, WRU, 1921-23; Instructor, 1923-24; 1925-26; Instructor in Physiological Chemistry, Univ. of Michigan, 1924-25.

1923-30 Minor Raymond Kendall, Ph.B., Bucknell Univ., 1911; M.D., WRU, 1914; Demonstrator in Otolaryngology, WRU, 1921-23; Instructor, 1923-27; Clinical Instructor, 1927-30.

1923-25 Arthur Benedict Raffl, B.S., Washington Univ., 1917; M.D., 1919; Demonstrator in Surgery, WRU, 1920-23; Instructor, 1923-25.

1923-27 Walter Henry Rieger, M.D., Univ. of Michigan, 1906; Demonstrator in Clinical Microscopy, WRU, 1909-10; Assistant in Otolaryngology, 1909-12; Demonstrator, 1922-23; Instructor, 1923-27.

1923-24 Warner Hopkins Tuckerman, A.B., Adelbert Coll., 1900; M.D., OWU, 1904; Demonstrator in Otolaryngology and Orthopedic Surgery, WRU, 1922-23; Instructor, 1923-24.

1924- Clayton Thomas Joseph Dodge, B.S., Ohio Wesleyan Univ., 1916; M.D., WRU, 1920; Demonstrator in Anatomy, WRU, 1921-22; in Pediatrics, 1921-24; Instructor, 1924-26; Clinical Instructor, 1926-

1924-25 William Justus Merle Scott, A.B., Oberlin Coll., 1914; M.D., Johns Hopkins Univ., 1918; A.M., Columbia Univ., 1922; Instructor in Surgery, WRU, 1924-25.

1925-26 Lee Foshay, M.D., Univ. of Pennsylvania, 1920; Demonstrator in Medicine, WRU, 1923-24; Instructor, 1925-26.

1925-33 Sidney J. Littman, A.B., Harvard Univ., 1913; M.D., WRU, 1918; Demonstrator in Dermatology, WRU, 1922-23; 1924-25; Instructor, 1925-27; Clinical Instructor, 1927-29; in Dermatology and Syphilology, 1929-33.

1925-26 Mildred Winchester, A.B., Wellesley Coll., 1919; A.M., WRU, 1925; Demonstrator in Bacteriology, WRU, 1924-25; Instructor, 1925-26.

1926- Arthur Casimir John Brickel, A.B., St. Ignatius Coll., 1917; M.D., WRU, 1921; Demonstrator in Anatomy, WRU, 1922-26; Clinical Instructor, 1926-; Demonstrator in Surgery, 1930-

1926-27 Benjamin Freeman, A.B., Amherst Coll., 1920; A.M., Columbia Univ., 1924; Ph.D., 1924; Instructor in Chemistry, Amherst Coll., 1920-21; Instructor in Biochemistry, WRU, 1926-27.

1926-33 Herbert Leroy Koechert, A.B., Adelbert Coll., 1915; M.D., WRU, 1918; A.M., 1919; Demonstrator in Pathology, 1918-19; in Clinical Pathology, 1925-26; Clinical Instructor, 1926-28; Instructor, 1928-33.

1926-27 Carl Krenz, A.B., Wesleyan Univ., 1921; M.D., Yale Univ., 1925; Instructor in Pathology, WRU, 1926-27.

1926- Spencer Alwyn Wahl, B.S., Geneva Coll., 1916; M.D., WRU, 1920; Demonstrator in Pathology, WRU, 1920-21; in Pediatrics, 1922-26; Clinical Instructor, 1926-

1927-42 Lee Hollister Ferguson, B.S., Ohio Wesleyan Univ., 1913; M.D., Columbia Univ., 1917; Instructor in Medicine, Columbia Univ., 1918-20; Demonstrator in Medicine, WRU, 1921-25; Clinical Instructor, 1927-42.

1927-34 Alan Daniel Finlayson, M.D., Univ. of Vermont, 1910; Demon-

strator in Nervous Diseases, WRU, 1921-27; Instructor, 1927-29; Clinical Instructor, 1929-34.

1927-41 Richard William Finley, A.B., Miami Univ., 1913; M.D., WRU, 1918; Demonstrator in Medicine, WRU, 1920-25; Clinical Instructor, 1927-41.

1927-30 Richard Joseph Lebowich, M.D., Harvard Univ., 1922; Associate in Pathology, WRU, 1926-27; Instructor, 1927-30.

1927-31 Robert Simonton Young, Grad., U.S., Naval Academy, 1908; M.D., Columbia Univ., 1919; Demonstrator in Genito-Urinary Surgery, WRU, 1926-27; Clinical Instructor, 1927-31.

1928-29 Robert Ethelbert Barney, M.D., Univ. of Michigan, 1921; M.S., 1925; Instructor in Dermatology and Syphilology, Univ. of Michigan, 1923-26; Demonstrator in Dermatology and Syphilology, WRU, 1927-28; Instructor, 1928-29.

1928-29 Edward Cathcart, A.B., Hope Coll., 1917; M.D., Univ. of Michigan, 1921; M.S., 1916; Senior Instructor in Surgery, Univ. of Michigan, 1926-27; Assistant Professor, 1927-28; Clinical Instructor in Genito-Urinary Surgery, WRU, 1928-29.

1928-29 John Theron Illick, A.B., Taylor Univ., 1910; A.B., Syracuse Univ., 1912; A.M., 1913; Ph.D., Princeton Univ., 1928; Instructor in Zoology, Univ. of West Virginia, 1913-16; Professor of Biology, Nanking, (China) Univ., 1920-27; 1929-38; Instructor in Histology and Embryology, WRU, 1928-29.

1928-29, 1939-42, 1943- Charles Spencer Stone, B.S., Northwestern Univ., 1924; M.D., 1925; Demonstrator in Medicine, WRU, 1927-28, 1931-39: Clinical Instructor, 1928-29, 1939-42, 1943-

1929-32 William Vernon Cox, A.B., Univ. of Michigan, 1921; M.D., Harvard Univ., 1925; Instructor in Surgery, WRU, 1929-32.

1929-33 Henry F. DeWolf, A.B., Univ. of Kansas, 1921; M.D., 1925; Demonstrator in Dermatology and Syphilology, WRU, 1928-29; Instructor, 1929-33.

1929-30 Louis George Herman, A.B., Univ. of Michigan, 1921; M.D., Washington Univ., 1924; Instructor in Surgery, WRU, 1929-30.

1930-32 Henry Alexander Blair, B.S., Univ. of Manitoba, 1925; M.S., 1927; Ph.D., Princeton Univ., 1930; Instructor in Biophysics, WRU, 1930-32.

1930-35 Homer John Hartzell, A.B., Ohio Wesleyan Univ., 1897; M.S., 1899; M.D., 1902; Instructor in Chemistry, OWU, 1907-09; Lecturer, 1909-10; Demonstrator in Pharmacology and Chemistry, WRU, 1910-11; in Pharmacology, 1911-16; Assistant in Ophthalmology, 1913-15; Demonstrator, 1919-30; Instructor, 1930-35.

1930-33 Robert Allan Moore, A.B., Ohio State Univ., 1921; M.S., 1927; M.D., 1928; Ph.D., WRU, 1930; Instructor in Pathology, WRU, 1930-33.

1930-33 George Richard Russell, A.B., Adelbert Coll., 1922; M.D., WRU, 1925; Instructor in Pediatrics, WRU, 1930-33.

1931-33 Walter Reece Berryhill, A.B., Univ. of North Carolina, 1921; M.D., Harvard Univ., 1927; Acting Associate Professor of Physiology, Univ. of North Carolina, 1929-30; Instructor in Medicine, WRU, 1931-33.

1932-33 Samuel Robert Means Reynolds, A.B., Swarthmore Coll., 1927; A.M., 1928; Ph.D., Univ. of Pennsylvania, 1931; Instructor in Physiology, WRU, 1932-33.

1933-36 Donald Chesbrough Bell, A.B., Univ. of Michigan, 1917; M.D., Cornell Univ., 1920; Demonstrator in Anatomy, WRU, 1924-38; in Surgery, 1925-33; Clinical Instructor, 1933-36.

1933- Alwyn Esbin Bennett, M.B., Univ. of Toronto, 1923; M.D., 1930; Demonstrator in Obstetrics, WRU, 1926-28; in Gynecology, 1929-33; Clinical Instructor, 1933-

1933-35 Paul Gross, A.B., Adelbert Coll., 1924; M.D., WRU, 1927; A.M., 1929; Demonstrator in Pathology, WRU, 1930-32; Instructor, 1933-35.

1933-43 John Paul Rankin, A.B., Ohio Wesleyan Univ., 1914; M.D., Johns Hopkins Univ., 1918; Demonstrator in Surgery, WRU, 1924-33; Clinical Instructor, 1933-43.

1933-34 Abram Leonard Van Horn, M.D., Univ. of Michigan, 1928; Instructor in Pediatrics, 1933-43.

1934-36 Harris Connor, B.S., Univ. of Texas, 1928; M.D., 1930; Demonstrator in Dermatology and Syphilology, WRU, 1933-34; Instructor, 1934-36.

1934-38 Isaac Henry Einsel, A.B., Northwestern Coll., 1919; M.D., WRU, 1923; Demonstrator in Medicine, WRU, 1928-34; Clinical Instructor, 1934-38.

1934-35 William Parrish Garver, A.B., Cornell Univ., 1926; M.D., 1929; Demonstrator in Medicine, WRU, 1932-33; Clinical Instructor, 1934-35; Demonstrator, 1935-

1934- Irwin Clay Hanger, A.B., and A.M., Univ. of Virginia, 1923; M.D., Johns Hopkins Univ., 1927; Demonstrator in Medicine, WRU, 1930-34; Instructor, 1936-37; Clinical Instructor, 1934-36, 1937-

1934-35 Maynard Stickney Johnson, A.B., Bates Coll., 1921; A.M., Univ. of Illinois, 1923; Ph.D., 1925; Assistant Professor of Zoology, Univ. of Minnesota, 1925-30; Assistant Professor of Zoology, Univ. of Utah, 1930-32; Instructor in Histology and Embryology, WRU, 1934-35.

1935-43 Ernest Frederick Bright, A.B., Hiram Coll., 1925; M.D., Harvard Univ., 1929; Demonstrator in Surgery, WRU, 1934-35; Instructor 1935-37; Clinical Instructor, 1937-43.

1935- David Abbot Chambers, B.S., Denison Univ., 1923; M.D., WRU, 1927; Demonstrator in Genito-Urinary Surgery, WRU, 1931-33; in Surgery, 1933-35; Instructor, 1935-36; Clinical Instructor, 1936-

1935-37 James Telford Duncan, B.S., Muskingum Coll., 1928; M.D., WRU, 1933; Instructor in Public Health, 1935-37.

1935- Charles Lowell Hudson, A.B., Alma Coll., 1926; M.D., Univ. of Michigan, 1930; Instructor in Medicine, WRU, 1935-37; Clinical Instructor, 1937-

1935-36 John Raymond Johnson, B.S., Washburn Coll., 1926; Ph.D., Tulane Univ., 1934; Instructor in Physiology, Battle Creek Coll., 1928-30; Instructor in Physiology, Tulane Univ., 1934-35; Instructor in Physiology, WRU, 1935-36.

1936- Joseph George Brady, A.B., St. Ignatius Coll., 1915; M.D., WRU, 1919; Demonstrator in Surgery, WRU, 1933-36; Clinical Instructor, 1936-

1936- John Mackay Hamilton, M.D., Dalhousie Univ., 1927; Demonstrator in Surgery, WRU, 1933-36; Clinical Instructor, 1936-

1936- Grace Edna Haskin, A.B., Lake Erie Coll., 1922; M.D., WRU, 1931; Assistant Professor of Histology and Embryology, Univ. of Texas, 1926-28; Demonstrator in Medicine, WRU, 1935-36; Clinical Instructor, 1936-

1936- Clarence Herbert Kuhlman, A.B., Miami Univ., 1923; M.D., WRU, 1926; Demonstrator in Surgery, WRU, 1933-36; Clinical Instructor, 1936-

1936- Edward Wolcott Parsons, A.B., Adelbert Coll., 1922; M.D., WRU, 1926; Demonstrator in Medicine, WRU, 1932-36; Instructor, 1936-40; Clinical Instructor, 1940-

1936-41 Herbert Beach Wright, M.D., Harvard Univ., 1923; Demonstrator in Genito-Urinary Surgery, WRU, 1929-36; Clinical Instructor, 1936-41.

1937-41 Donald Edwin Bowman, A.B., Adelbert Coll., 1933; A.M., WRU, 1935; Ph.D., 1937; Instructor in Biochemistry, WRU, 1937-41.

1937- Clovis Hamilton Phillips, A.B., Ohio State Univ., 1924; M.D., Univ. of Cincinnati, 1928; Demonstrator in Gynecology, WRU; 1932-37; Clinical Instructor, 1937-

1937- William Alexander Read, A.B., Virginia Military Institute, 1928; M.D., Univ. of Virginia, 1933; Demonstrator in Medicine, WRU, 1936-37; Instructor, 1937-41; Clinical Instructor, 1941-

1937- Sidney J. Stone, A.B., Adelbert Coll., 1923; M.D., WRU, 1926; Demonstrator in Obstetrics, WRU, 1928-29; in Gynecology, 1930-37; Instructor, 1937-

1937-39 George Wilbur Wright, B.S., Indiana Univ., 1930; M.D., 1932; Instructor in Physiology, WRU, 1937-39.

1938-42 Eunice Elizabeth Bryan, A.B., Flora Stone Mather Coll., 1933; M.D., WRU, 1937; Instructor in Bacteriology, WRU, 1938-42.

1938- Charles Herbert Garvin, A.B., Howard Univ., 1911; M.D., 1915; Demonstrator in Genito-Urinary Surgery, WRU, 1935-38; Clinical Instructor, 1938-

1938- Charles Spencer Higley, A.B., Univ. of Michigan, 1926; M.D., 1930; Demonstrator in Medicine, WRU, 1934-38; Clinical Instructor, 1938-

1938- Bernard Boysen Larsen, B.S., Univ. of Iowa, 1928; M.D., 1930; Demonstrator in Surgery, WRU, 1936-38; Clinical Instructor, 1938-

1938-40 George Harold Mangun, B.S., Montana State Coll., 1934; Ph.D., WRU, 1938; Instructor in Biochemistry, WRU, 1938-40.

1938-39 Walter Frederick Schwartz, A.B., Univ. of South Dakota, 1930; M.D., Rush Medical Coll., 1934; Demonstrator in Dermatology and Syphilology, WRU, 1937-38; Instructor, 1938-39.

1938- Vladimir Leslie Tichy, B.S., Case School of Applied Science, 1921; M.D., WRU, 1931; Demonstrator in Surgery, WRU, 1936-38; Clinical Instructor, 1938-

1938-40 Peter Paul Werle, A.B., Adelbert Coll., 1933; M.D., WRU, 1938; Instructor in Anatomy, WRU, 1938-40.

1939-40 Edgar Shugert Ingraham, Jr., A.B., Colgate Univ., 1931; M.D.,

WRU, 1935; Demonstrator in Pathology, WRU, 1938-39; Instructor, 1939-40.

1939- Walter Maximilian Solomon, A.B., Adelbert Coll., 1931; M.D., WRU, 1934; Demonstrator in Medicine, WRU, 1937-39; Clinical Instructor, 1939-

1939- Martin Bennett Taliak, A.B., Baldwin-Wallace Coll., 1926; M.D., Univ. of Michigan, 1930; Demonstrator in Surgery, WRU, 1935-39; Clinical Instructor, 1939-

1939-42 Jacob Michael Werle, A.B., Adelbert Coll., 1934; M.D., WRU, 1937; Instructor in Physiology, WRU, 1939-42.

1939-41 Mark Carroll Wheelock, M.D., Univ. of Iowa, 1930; Demonstrator in Pathology, WRU, 1938-39; Instructor, 1939-41.

1939- Zolton Tillson Wirtschafter, B.S., Case School of Applied Science, 1921; M.D., Univ. of Cincinnati, 1926; Demonstrator in Medicine, WRU, 1935-39; Clinical Instructor, 1939-

1940-41 Hal Elson Freeman, B.S., Southwest Missouri State Teacher's Coll., 1928; A.B., 1929; B.S., Univ. of Missouri, 1932; M.D., Univ. of Louisville, 1934; Instructor in Hygiene, Univ. of Illinois, 1936-37; Demonstrator in Dermatology and Syphilology, WRU, 1939-40; Instructor, 1940-41.

1940- Boyd G. King, B.S., Univ. of Nebraska, 1932; M.D., 1933; Demonstrator in Medicine, WRU, 1936-40; Instructor, 1940-

1940-42 Robert Charles Mellors, A.B., Adelbert Coll., 1937; A.M., WRU, 1938; Ph.D., 1940; Instructor in Biochemistry, WRU, 1940-42.

1940- John Albert Murphy, A.B., Adelbert Coll., 1931; M.D., WRU, 1934; Demonstrator in Orthopedic Surgery, WRU, 1938-40; Instructor, 1940-

1940- Leo Walzer, A.B., Harvard Univ., 1929; M.D., 1933; Demonstrator in Medicine, WRU, 1937-40; Clinical Instructor, 1940-

1941- Antonio Secundo Broglio, A.B., Adelbert Coll., 1928; M.D., WRU, 1932; Demonstrator in Medicine, WRU, 1937-41; Clinical Instructor, 1941-

1941- Nicholas Edward Clayman, A.B., Adelbert Coll., 1924; M.D., WRU, 1928; Demonstrator in Gynecology, WRU, 1932-41; Instructor, 1941-

1941- Samuel Bartholomew Cowen, M.D., Univ. of Colorado, 1911; Demonstrator in Ophthalmology, WRU, 1921-24; in Otolaryngology, 1933-41; Clinical Instructor, 1941-

1941- Glen Keith Folger, B.S., Univ. of Nebraska, 1928; M.D., 1930; Demonstrator in Obstetrics, WRU, 1933-35; in Gynecology, 1935-41; Clinical Instructor, 1941-

1941- Horace Kerr Giffen, A.B., Muskingum Coll., 1922; M.D., WRU, 1926; Instructor in Pathology, WRU, 1941-

1941- William Paul Jennings, B.S., Pennsylvania State Coll., 1933; M.D., Univ. of Pennsylvania, 1937; Instructor in Pathology, WRU, 1941-

1941- Albert Loveman, A.B., Adelbert Coll., 1916; M.D., WRU, 1919; Demonstrator in Medicine, WRU, 1939-41; Clinical Instructor, 1941-

1941- Horace Ervin Mitchell, M.D., Jefferson Medical Coll., 1912; Demonstrator in Otolaryngology, WRU, 1936-41; Instructor, 1941-

1941- Arthur Williams Robishaw, A.B., Adelbert Coll., 1924; M.D., WRU, 1927; Demonstrator in Obstetrics, WRU, 1930-31, 1940-41; Clinical Instructor, 1941-

1941-45 Edward Joseph Stefanic, A.B., Loyola Univ., 1917; M.D., 1921; Demonstrator in Medicine, WRU, 1935-41; Clinical Instructor, 1941-45.

1941- Arthur Wince Tallman, B.S., Purdue Univ., 1928; M.S., 1930; Instructor in Bacteriology, WRU, 1941-

1941- Ralph Kinsey Updegraff, Jr., B.S., Kenyon Coll., 1930; M.D., WRU, 1933; Demonstrator in Medicine, WRU, 1937-41; Clinical Instructor, 1941-

1941-42 René Wégria, M.D., Univ. of Liege, 1936; Instructor in Physiology, WRU, 1941-42.

1941- Leard Burdett Wylie, B.S., Coll. of Wooster, 1925; M.D., WRU, 1929; Demonstrator in Obstetrics, WRU, 1937-41; Clinical Instructor, 1941-

1942- Alexander Taylor Bunts, A.B., Yale Univ., 1920; M.D., Harvard Univ., 1924; Clinical Instructor in Surgery, WRU, 1942-

1942- Frederick Ewald Caldwell, Ph.B., Univ. of Chicago, 1935; Ph.D., 1943; Instructor in Parasitology, 1942-

1942-43 William Bricker Chamberlin, Jr., A.B., Yale Univ., 1934; M.D., Harvard Univ., 1938; Demonstrator in Pathology, WRU, 1941-42; Instructor, 1942-43.

1942- Robert Scott Dinsmore, A.B., Univ. of Kansas, 1914; M.D., Washington Univ., 1917; Demonstrator in Surgery, WRU, 1919-23; Clinical Instructor, 1942-

1942- Oliver Eitzen, M.D., Univ. of Kansas, 1939; Demonstrator in Pathology, WRU, 1941-42; Instructor, 1942-

1942-44 Eldred Benjamin Heisel, A.B., Oberlin Coll., 1935; M.D., Ohio State Univ., 1939; Instructor in Dermatology and Syphilology, WRU, 1942-44.

1942-43 Charles Eric Henry, A.B., Fresno State Coll., 1937; A.M., Univ. of Iowa, 1938; Ph.D., 1940; Instructor in Neurology, WRU, 1942-43.

1942- Alec Cameron MacNiel, M.B., Univ. of Toronto, 1927; M.D., 1928; Demonstrator in Medicine, WRU, 1937-42; Clinical Instructor, 1942-

1942- Myron Munro Perlich, A.B., Adelbert Coll., 1930; M.D., Ohio State Univ., 1936; Demonstrator in Medicine, WRU, 1941-42; Instructor, 1942-

1942- Walter Herbert Pritchard, A.B., Hamilton Coll., 1932; M.D., Harvard Univ., 1936; Demonstrator in Medicine, WRU, 1940-41; Instructor, 1942-

1942-43 James Milton Shaffer, B.S., Coll. of St. Thomas, 1939; M.S., Univ. of Minnesota, 1941; Instructor in Pharmacology, WRU, 1942-43.

1942-45 Robert Everett Shipley, B.S., Otterbein Coll., 1934; M.D., WRU, 1938; Instructor in Medicine, WRU, 1942-45

1942- Edward Mitchell Zucker, M.D., Ohio State Univ., 1938; Demonstrator in Nervous Diseases, WRU, 1940-42; Clinical Instructor, 1942-

1943- Lawrence N. Atlas, A.B., Adelbert Coll., 1927; M.D., WRU, 1930; Demonstrator in Anatomy, WRU, 1935-42; in Surgery, 1941-43; Clinical Instructor, 1943-

1943- Frank McArthur Barry, A.B., Oberlin Coll., 1933; M.D., WRU, 1938; Demonstrator in Surgery, WRU, 1942-43; Instructor, 1943-

1943- Carroll Clarence Dundon, A.B., Coll. of Wooster, 1931; M.D., WRU, 1938; Demonstrator in Roentgenology, WRU, 1942-43; Instructor, 1943-

1943- Regis Francis Golubski, A.B., Adelbert Coll., 1934; M.D., WRU, 1938; Demonstrator in Pediatrics, WRU, 1942-43; Instructor, 1943-

1943-44 Winthrop R. Hubler, M.D., Northwestern Univ., 1941; Demonstrator in Dermatology and Syphilology, WRU, 1942; Instructor, 1943-44.

1943- Yale Joel Katz, A.B., Occidental Coll., 1935; M.S., Univ. of Chicago, 1937; Ph.D., 1941; Instructor in Experimental Pathology, WRU, 1943-

1943- Eugene Frederick Koster, A.B., Swarthmore Coll., 1933; M.D., Temple Univ., 1939; Demonstrator in Pathology, WRU, 1942-43; Instructor, 1943-

1943-45 Max Krause, B.S., Univ. of Oklahoma, 1937; M.D., 1939; Demonstrator in Dermatology and Syphilology, WRU, 1942-43; Instructor, 1943-45.

1943- Carl Arthur Kuether, A.B., Miami Univ., 1936; M.S., Wayne Univ., 1940; Ph.D., George Washington Univ., 1943; Instructor, in Biochemistry, George Washington Univ., 1942-43; Instructor in Biochemistry, WRU, 1943-

1943- Middleton Hugher Lambright, Jr., M.D., Meharry Medical Coll., 1939; Demonstrator in Surgery, WRU, 1942-43; Instructor, 1943-

1943- Jack Ralph Leonards, B.S., McGill Univ., 1939; M.S., Virginia Polytechnic Institute, 1940; Instructor in Biochemistry, WRU, 1943-

1943- John Spratt Mackrell, Jr., A.B., Univ. of Pittsburgh, 1937; M.D., 1939; Instructor in Pathology, WRU, 1943-

1943- Donald Neilson MacVicar, A.B., Univ. of Pennsylvania, 1935; M.D., 1939; Demonstrator in Dermatology and Syphilology, WRU, 1942-43; Instructor, 1943-

1943- Maynard Prince Pride, A.B., Marietta Coll., 1935; M.D., WRU, 1939; Demonstrator in Surgery, WRU, 1942-43; Instructor, 1943-

1943- Linda Anra Tischer, B.S., Northwestern Univ., 1932; M.D., Univ. of Rochester, 1938; Demonstrator in Pediatrics, WRU, 1942-43; Instructor, 1943-

1943- Alvyn Weiss Tramer, A.B., Adelbert Coll., 1929; M.D., WRU, 1933; Clinical Instructor in Orthopedic Surgery, WRU, 1943-

APPENDIX C: OFFICERS

Presidents of Western Reserve College and University

1830-1833 Charles Backus Storrs
1834-1855 George Edmond Pierce
1855-1871 Henry Lawrence Hitchcock
1871-1886 Carroll Cutler
1887-1890 Hiram Collins Haydn
1890-1921 Charles Franklin Thwing
1921-1923 James DeLong Williamson
1923-1934 Robert Eugene Vinson
1934- Winfred George Leutner

Deans

1843-1844 John Lang Cassels
1844-1846 John Delamater
1846 (Mar. to Oct.) Jared Potter Kirtland
1846-1861 John Delamater
1861-1873 John Lang Cassels
1873-1881 John Bennitt
1881-1883 William Johnston Scott
1883-1893 Gustav Carl Erich Weber
1893-1895 Isaac Newton Himes
1895-1900 Hunter Holmes Powell
1900-1912 Benjamin Love Millikin
1912-1928 Carl August Hamann
1928-1944 Torald Hermann Sollmann

Secretaries

1843-1844 Record lacking
1844-1845 Jacob John Delamater
1845-1852 John Lang Cassels
1852-1856 Samuel St. John
1856-1862 Proctor Thayer
1862-1868 Record lacking
1868-1873 Jacob Laisy
1873-1878 Frank Wells
1878-1881 Hunter Holmes Powell
1881-1883 John Henry Lowman
1883-1893 Charles Barnsdall Parker
1893-1907 George Coates Ashmun
1907-1916 Frederick Clayton Waite
1916-1927 Howard Thomas Karsner
1927-1929 Roger Griswold Perkins
1929-1945 Victor Caryl Myers

Treasurers

1843-1845 Horace A. Ackley

1845-1852 Samuel St. John
1852-1861 John Lang Cassels
1861-1869 Record lacking—probably Cassels
1869-1873 John Lang Cassels
1873-1883 Isaac Newton Himes
1883-1895 Hunter Holmes Powell
(The office of treasurer of the faculty was abolished in 1895).

Registrars

1873-1883 Isaac Newton Himes
1883-1893 Hunter Holmes Powell
1893-1907 George Coates Ashmun
1907-1915 Frederick Clayton Waite
1915-1924 Herbert Allen Hitchcock, A.B., A.M.
1924-1934 Frances Cleaveland Hunter
1934-1935 John Faris Berry, A.B., A.M., B.D.
1935-1943 Juliette Terry Brown, A.B.
1943-1945 Mary Louise (Mitchell) Randt, A.B.
(This office was not occupied by a member of the faculty after 1915.)

APPENDIX D: EMERITUS PROFESSORS, WITH YEAR OF ELECTION OF EACH TO THE TITLE

1861 John Delamater
1864 Jared Potter Kirtland
1873 John Lang Cassels
1883 Henry Kirke Cushing
1890 Proctor Thayer
1892 Henry Justus Herrick
1892 William Johnston Scott
1896 Jacob Laisy
1905 John Eaton Darby
1910 Dudley Peter Allen
1911 Hunter Holmes Powell
1912 George Coates Ashmun
1912 Benjamin Love Millikin
1912 Henry Swift Upson
1913 Charles Barnsdall Parker
1914 William Thomas Corlett
1924 George Washington Crile
1925 William Henry Humiston
1925 John Marvin Ingersoll
1928 Frank Emory Bunts
1930 Roger Griswold Perkins
1932 John Pascal Sawyer
1936 William Evans Bruner
1939 John James Thomas (Emeritus Associate Professor)
1940 Frederick Clayton Waite
1944 Torald Hermann Sollman
1945 Henry John Gerstenberger

APPENDIX E: PRESIDENTS OF OHIO STATE MEDICAL SOCIETY WHO HAVE BEEN CONNECTED WITH THE SCHOOL OF MEDICINE OF WESTERN RESERVE UNIVERSITY

Faculty

1848 Jared Potter Kirtland
1852 Horace A. Ackley
1864 Gustav Carl Erich Weber
1873 Henry Justus Herrick
1876 William Johnston Scott
1892 Dudley Peter Allen
1897 William Henry Humiston
1910 Roland Edward Skeel
1915 William Edgar Lower
1928 Charles Walter Stone
1933 Clyde Lottridge Cummer
1941 Harry Vincent Paryzek

Alumni

1859 Leander Firestone, '46
1872 Andrew Barry Jones, '50
1884 John Charles Reeve, '50
1889 John McCurdy, '58
1916 Harmon Baker Gibbon, x78
1924 George Edward Follansbee, x95
1925 Clarence Davey Selby, '02
1933 Clyde Lottridge Cummer, '07
1941 Harry Vincent Paryzek, '15

Censors

1856 Peter Allen, 1845-1861
1862 John Wadhams Russell, 1853-1861
1870 Thaddeus Asbury Reamy, 1863-1869
1884 John Charles Reeve, 1881-1897
1886 Thomas McEbright, 1881-1895

APPENDIX F: PROFESSORS AND DEANS

CHARITY HOSPITAL MEDICAL COLLEGE (1864-1870)
MEDICAL DEPARTMENT OF UNIVERSITY OF WOOSTER (1870-1896)
MEDICAL DEPARTMENT OF OHIO WESLEYAN UNIVERSITY (1896-1910)

The one hundred names are arranged in the order of appointment to a professorship. Multiple appointments in the same year are in alphabetical order. Service as emeritus professor is not included in the dates. An asterisk (*) before a date indicates that the person taught in this group of colleges under a lower title prior to becoming a professor. A section mark (§) indicates that the person was also at some time a professor in the Medical Department of Western Reserve College or University, the position of the sign showing whether the time was before or after the dates here stated. Additional information concerning such individuals will be found in Appendix B.

Loss of the records of one of the boards of trustees and the incompleteness of the records of the two other boards, as well as the loss of the records of the faculty from 1896 to 1910, make some dates of appointments and resignations in this appendix of uncertain accuracy. In many cases the only available source is in the catalogues, which are known to be not always reliable.

The following abbreviations are used for institutions that appear frequently: CHMC for Charity Hospital Medical College, WU for Medical Department of University of Wooster, OWU for Medical Department of Ohio Wesleyan University, WRC for Medical Department of Western Reserve College, and WRU for Medical Department of Western Reserve University.

The subjects that follow the educational record are those that were included in the professorial title or titles of the person. Modern terminology is used, which is not always the same as that used when the professorship was occupied. Towns named are in Ohio unless otherwise stated.

1864-68 Robert Nelson Barr, M.D., Starling Medical Coll., 1854; Anatomy; d. Chattanooga, Tenn., 10-13-1878, a. 46.

1864-67 Marshall Sinclair Castle, Medical Jurisprudence; d. Cleveland, 12-11-1881, a. 59.

1864-74, 1875-76 James Dascomb, M.D., Dartmouth Medical Coll., 1833; Chemistry, Toxicology; d. Oberlin, 4-1-1880, a. 72.

1864-66 Addison Porter Dutcher, M.D., (institution and date not found); Medicine; d. Cleveland, 1-30-1884, a. 66.

1864-84 Leander Firestone, M.D., WRC, 1846; LL.D., Ohio Univ., 1874; Obstetrics, Gynecology, Pediatrics, Principles of Surgery; d. Wooster, 11-9-1888, a. 70.

1864-76 Abraham Metz., M.D., WRC, 1848; Ophthalmology, Otology; d. Massillon, 2-1-1876, a. 46.

1864-68 James Henry Salisbury, B.N.S., Renssalaer Polytechnic Institute, 1848; M.D., Albany Medical Coll., 1850; A.M., Union Coll., 1852; LL.D., 1887; LL.D., Amity Coll. (Illinois); Physiology, Histology, Pathology; d. Dobbs Ferry, N.Y., 8-28-1905, a. 81.

1864-65 Samuel Mustard Sargent, A.B., Trinity Coll., 1854; M.D., WRC, 1856; Diseases of Urinary Organs; d. Santa Cruz, Cal., 4-10-1898, a. 67.

1864-81§ William Johnston Scott, A.B., Kenyon Coll., 1848; LL.D., 1898; M.D., Starling Medical Coll., 1855; Material Medica, Pharmacy, Botany, Medicine; d. Cleveland, 5-5-1896, a. 73.

1864-81§ Gustav Carl Erich Weber, M.D., St. Louis Medical Coll., 1851; LL.D., Univ. of Wooster, 1877; Military Surgery, Clinical Surgery; d. Willoughby, 3-21-1912, a. 83.

1866-69, 1879-84 Jamin Strong, M.D., WRC, 1849; Materia Medica, Pharmacy, Botany, Therapeutics, Nervous and Mental Diseases; d. Cleveland, 1-30-1895, a. 69.

1867-81§ Henry Justus Herrick, A.B., Williams Coll., 1858; A.M. 1861; M.D., Rush Medical Coll., 1861; Gynecology, Obstetrics, Pediatrics, Principles of Surgery; d. Cleveland, 1-28-1901, a. 68.

1867-81§ Conway Whittier Noble, A.B., Univ. of Michigan, 1863; A.M., 1866; LL.B., Ohio State and Union Law Sch. (Cleveland), 1864; Medical Jurisprudence; d. Cleveland, 12-5-1910, a. 68.

*1868-70 William H. Jones, M.D., WRC, 1862; Anatomy; d. Cleveland, 10-8-1870, a. 32.

1868-71 Colin Mackenzie, M.D., WRC, 1860; Physiology, Histology, Pathological Anatomy, Material Medica, Therapeutics; d. New York City, 1-7-1891, a. 52.

1868-73 John Birchard Rice, M.D., Univ. of Michigan, 1857; Military Surgery, Genito-Urinary Diseases, Obstetrics, Dermatology; d. Fremont, 1-14-1893, a. 60.

1869-72 James Fowkes Armstrong, M.D., WRC, 1864; Physiology, Histology, Pathological Anatomy; d. Cleveland, 12-7-1897, a. 58.

1870-73 Thomas Gold Cleveland, M.D., WRC, 1847; Materia Medica; d. Cleveland, 12-3-1873, a. 48.

*1879-87 Akin Constantine Miller, M.D., Starling Medical Coll., 1862; M.D., Bellevue Hospital Medical Coll., 1868; Genito-Urinary Diseases, Gynecology, Obstetrics; d. Cleveland, 6-21-1887, a. 55.

1870-81 Joel Pomerene, M.D., Jefferson Medical Coll., 1858; Pediatrics; d. Millersburg, 9-15-1881, a. 55.

1870-73 Samuel William Wetmore, M.D., Univ. of Buffalo, 1862; Materia Medica, Therapeutics, Anatomy; d. Buffalo, N.Y., 5-28-1906, a. 74.

1872-74 Oscar Coleman DeWolf, A.M. (Hon.) Williams Coll., 1868; M.D., Berkshire Medical Coll., 1857; M.D., New York Medical Coll., 1858; Histology, Pathology; b. Chester, Mass., 8-8-1835; (record of death not found).

*1873-81 §1893-98 Henry William Kitchen, M.D., WU, 1871; Anatomy, Operative Surgery; d. Cleveland, 9-30-1907, a. 64.

1874-76 Martin Luther Mead, A.B., Middlebury Coll., 1855; M.D., Albany Medical Coll., 1859; Chemistry, Toxicology; d. Highland Lake, Calif., 9-5-1899, a. 65.

*1874-81§ Theodore Clark Miller, M.D., CHMC, 1867; Materia Medica, Therapeutics, Obstetrics; d. Massillon, 1-23-1936, a. 80.

* 1874-81§, 1893-1910 Daniel Buttrick Smith, A.B., Oberlin Coll., 1860; A.M., 1863; M.D., CHMC, 1867; Physiology, Ophthalmology, Otology, Laryngology; d. Cleveland, 5-19-1922, a. 82.

*1876-81§ John Henry Lowman, A.B., Wesleyan Univ., 1871; M.D., WU, 1873; M.D., Coll. of Physicians and Surgeons, New York City, 1877; Materia Medica, Therapeutics; d. New York City, 1-23-1919, a. 69.

1882-92 Charles Carroll Arms, A.B., Dartmouth Coll., 1865; A.M., 1868; M.D., Jefferson Medical Coll., 1868; Anatomy, Operative Surgery, Genito-Urinary Diseases; d. Ocala, Fla., 8-4-1931, a. 91.

1882-84 John Emmett Burns, M.D., WU, 1874; Pediatrics; d. Cleveland, 8-18-1909, a. 58.

* 1882-83 Herbert Carrington Foote, C.E., Columbia Univ., 1876; Chemistry, Toxicology; d. Cleveland, 8-24-1888, a. 36.

1882-85 George Hunert, M.D., Medical Coll. of Ohio, 1880; Medicine; d. Cleveland, 11-1-1885, a. ?

1882-83 George Mitchell, A.B., Ohio Wesleyan Univ., 1858; M.D., Medical Coll. of Ohio, 1862; Materia Medica, Therapeutics; d. Mansfield, 12-17-1909, a. 72.

§1882-84 Xenephon Christmas Scott, A.B., Jefferson Coll., 1865; M.D., WRC, 1867; M.D., Coll. of Physicians and Surgeons, New York City, 1869; Ophthalmology, Otology; d. Cleveland, 9-30-1909, a. 66.

1882-84 Reuben Aleshire Vance, M.D., Bellevue Hospital Medical Coll., 1867; Surgery; d. Newmarket, N.J., 3-19-1894, a. 49.

* 1882-91 Frank Jones Weed, M.D., CHMC, 1868; Surgery; d. Cleveland, 3-28-1891, a. 46.

1882-85 Theodore Arthur Weed, M.D., WU, 1877; L.M., Edinburgh, 1879; Thoracic Diseases, Physical Diagnosis; d. Cleveland, 11-28-1920, a. 64.

*1883-84 William Jackson Sheppard, M.D., CHMC, 1870; Materia Medica, Therapeutics; d. Cleveland, 5-29-1905; a. 62.

*1883-85 Joseph Henry Stoll, M.D., Jefferson Medical Coll., 1871; Materia Medica; d. Wooster, 8-12-1927, a. 78.

*1883-84 Louis Bryant Tuckerman, A.B., Amherst Coll., 1872; A.M., 1877; M.D., Long Island Hospital Medical Coll., 1877; Physiology; d. Cleveland, 3-5-1902, a. 52.

*1884-86§ William Thomas Corlett, M.D., WU, 1877; L.R.C.P., London, 1881; Dermatology; living in Cleveland, 1944.

*1884-1903 Charles Frederic Dutton, M.D., Bellevue Hospital Medical Coll., 1864; Pediatrics, Hygiene, Obstetrics, Medicine; d. Cleveland, 1-9-1921, a. 89.

1884-86 Henry Z. Gill, M.D., Jefferson Medical Coll., 1857; A.M., McKendree Coll., 1875; LL.D., Univ. of Wooster, 1885; Surgery; d. Long Beach, Calif., 2-6-1907, a. 75.

1884-85 Charles William Kolbe, Ph.D., Univ. of Leipsig, 1878; M.D. (Hon.), WU, 1884; Chemistry, Toxicology; d. Chicago, Ill., 2-25-1919, a. 63.

*1884-94 Charles Stedman Pomeroy, A.B., Columbia Coll., 1854; A.M., 1857; Grad. Union Theological Seminary, 1857; D.D., Western Reserve Coll., 1874; Ethics; d. Cleveland, 9-10-1894, a. 60.

*1884-85 Andrew Jackson Scott, M.D., Univ. of Buffalo, 1863; Gynecology; d. Loudonville, 5-4-1895, a. 67.

*1884-91 John Robinson Smith, M.D., WRC, 1879; Physiology, Materia Medica, Therapeutics, Clinical Medicine; d. Cleveland, 3-24-1919, a. 65.

*1884-96 Andrew Squire, A.B., Hiram Coll., 1872; LL.D., Kenyon Coll., 1899; Medical Jurisprudence; d. Cleveland, 1-5-1934, a. 83.

*1885-88 Alvin Eyer, M.D., Detroit Medical Coll., 1877; Physiology, Histology; (record of death not found).

1885-86 Albert Johann Hahn, M.D., Coll. Physicians and Surgeons, Boston, 1882; M.D., Dartmouth Medical Coll., 1885; Medicine; d. Sharon, Vt., 8-1-1920, a. 67.

1885-88 Francois Oscar Nodine, M.D., WU, 1880; Ophthalmology; d. at sea, 11-12-1890, a. 35.

*1886-93§ George Coates Ashmun, M.D., WRC, 1873; State Medicine, Hygiene, Pediatrics; d. Cleveland, 6-25-1929, a. 88.

1886-95 Basil Brown Brashear, M.D., Coll. of Physicians and Surgeons, New York City, 1861; Medicine, Applied Therapeutics, Nervous Diseases; d. Marlboro, Md., 10-2-1903, a. 81.

*1886-87 Oliver Franklyn Gordon, M.D., WRU, 1882; Chemistry, Toxicology; d. Cleveland, 1-13-1897, a. 39.

*1888-94§ Frank Emory Bunts, Grad., U.S. Naval Acad., 1881; M.D., WRU, 1886; Surgery; d. Cleveland, 11-28-1928, a. 67.

*1888-95 Joseph Feil, Ph.G., New York Coll. of Pharmacy, 1880; Chemistry, Toxicology; d. Cleveland, 1-31-1917, a. 63.

*1888-90 John George Gehring, M.D., WRU, 1885; D.Sc., Western Reserve Univ., 1913; Microscopy, Pathology; d. Bethel, Me., 9-1-1932, a. 75.

1888-1910 Marcus Rosenwasser, M.D., Univ. of Wurzburg, 1867; Gynecology, Surgery; d. Cleveland, 9-4-1910, a. 64.

*1889-1910 Albert Rufus Baker, M.D., WRC, 1879; Ophthalmology, Otology, Laryngology; d. Cleveland, 4-4-1911, a. 53.

* 1889-1903 Clyde Ellsworth Cotton, M.D., WU, 1885; Anatomy; d. Asheville, N.C., 11-29-1937, a. 75.

*1889-93 Arnold Peskind, M.D., Jefferson Medical Coll., March 1887; M.D., WU, July 1887; Physiology, Histology, Pathology; d. Cleveland 10-30-1944, a. 81.

*1889-93 Pascal Hall Sawyer, M.D., WRC, 1858; Obstetrics, Pediatrics; d. Cleveland, 6-26-1905, a. 68.

*1890-91 Charles Hope Merz, A.B., Univ. of Wooster, 1883; A.M., 1886; M.D., WU, 1885; Histology, Pathology; living in Sandusky, 1944.

*1890-1903 Henry Warren Rogers, M.D., Univ. of Buffalo, 1880; Pediatrics, Materia Medica, Therapeutics, Clinical Medicine, Medical Diagnosis; d. Cleveland, 1-31-1926, a. 67.

*1892-1900§ George Washington Crile, A.B., Ohio Northern Univ., 1884; A.M., 1888; M.D., WU, 1887; A.M., Univ. of Wooster, 1894; LL.D., 1916; Ph.D. (Hon.), Hiram Coll., 1901; M.Ch., Univ. of Dublin, 1925; LL.D., Univ. of Glasgow, 1928; Physiology, Histology, Surgery; d. Cleveland, 1-7-1943, a. 78.

*1892-1905 Henry Clinton Eyman, M.D., Columbus Medical Coll., 1880; Mental and Nervous Diseases; d. Massillon, 10-8-1925, a. 69.

*1892-1902 Martin Stamm, M.D., Univ. of Berne, 1872; Surgery; d. Fremont, 5-23-1918, a. 70.

*1892-1905 William Edgar Wirt, Grad. U.S. Naval Acad., 1884; A.M., Univ. of Wooster, 1889; Ph.D. (Hon.), Ohio Univ., 1891; M.D., WU, 1888; M.D., Coll. of Physicians and Surgeons, New York City, 1892; Orthopedics; d. Miami, Fla., 3-19-1906, a. 44.

§1893-1904 Guy Buttles Case, A.B., Hobart Coll., 1871; A.M., 1879; A.M., Kenyon Coll., 1897; M.D., WU, 1873; Dermatology, Venereal Diseases; d. Cleveland, 2-26-1904, a. 52.

1893-1910 Samuel Walter Kelley, M.D., WRU, 1884; Pediatrics; d. Cleveland, 4-20-1929, a. 74.

1893-95 William Augustus Knowlton, M.D., CHMC, 1867; Obstetrics, Medicine; d. Cuyahoga Falls, 11-10-1933, a. 94.

*1893-1910§ Charles Barnsdall Parker, A.B., Univ. of Rochester, 1874; M.D., WU, 1877; L.R.C.S., London, 1880; M.S., Ohio Wesleyan Univ., 1910; Surgery; d. Cleveland, 9-18-1918, a. 65.

1893-1905 Nathan Stone Scott, M.D., WRU, 1889; A.M., Oberlin Coll., 1895; Genito-Urinary Diseases, Anatomy, Surgery; d. St. Petersburg, Fla., 12-24-40, a. 77.

* 1894-1910§ Joseph Franklin Hobson, M.D., WRU, 1886; Surgery; d. Cleveland, 5-24-1914, a. 52.

1894-98 Albert Philip Ohlmacher, M.D., Northwestern Univ., 1890; Pathology, Bacteriology; d. Detroit, Mich., 11-9-1916, a. 51.

1895-96 John North, A.M., Western Coll. (Toledo, Iowa); Ph.C., Iowa Wesleyan Coll., 1879; M.D., Univ. of Michigan, 1863; Chemistry; d. New Rochelle, N.Y., 8-13-1925, a. 81.

*1895-1904 John Perrier, M.D., McGill Univ., 1868; Medicine; b. 1843, (record of death not found).

*1896-1907 Henry Ebenezer Handerson, A.B., Hobart Coll., 1858; A.M., 1866; M.D., Coll. of Physicians and Surgeons, New York City, 1867; State Medicine, Hygiene, Sanitary Science; d. Cleveland, 4-20-1918, a. 81.

1896-1901 Charles Elihu Slocum, M.D., Coll. of Physicians and Surgeons, New York City, 1869; M.D., Jefferson Medical Coll., 1876; Ph.D., Univ. of Pennsylvania, 1877; LL.D., Defiance Coll., 1903; Medical Ethics, Psychology; d. Toledo, 6-7-1915, a. 73.

1896-1910 John George Spenzer, M.D., WRU, 1884; Ph.D., Univ. of Strassburg, 1893; Chemistry, Pharmacology; d. Cleveland, 7-26-1932, a. 67.

*1897-1910 John Bernard McGee, M.D., WRC, 1878; Therapeutics, Materia Medica; d. Cleveland, 2-10-1923, a. 69.

*1897-1910 Roland Edward Skeel, M.D., Univ. of Michigan, 1890; A.M., 1915; M.S., Ohio Wesleyan Univ., 1915; Obstetrics, Gynecology; d. Covina, Calif., 9-4-1925, a. 56.

§1898-1902 Benjamin Whitley Holliday, M.D., WRC, 1869; Medical Jurisprudence; d. Cleveland, 2-18-1914, a. 66.

*1899-1908 Thomas Charles Martin, M.D., Cleveland Homeopathic Hos-

pital Coll., 1886; M.D., OWU, 1897; Ph.D., Hiram Coll., 1898; Proctology; d. Washington, D.C., 8-30-1926, a. 62.

*1899-1908 Robert Pollock, M.D., WRU, 1892; Materia Medica; d. San Diego, Calif., 6-3-1930, a. 64.

*1900-05 Wilmer Austin Tims, M.D., Cleveland Homeopathic Hospital Coll., 1888; M.D., WU, 1899; Anatomy; d. Cleveland, 5-19-1922, a. 58.

*1901-04 Nathan Weidenthal, A.B., Univ. of Rochester, 1876; M.D., WU, 1878; Pathology; d. Cleveland, 9-7-1931; a. 76.

1902-10 Edson Burton Bauder, A.B., Ohio Wesleyan Univ., 1870; A.M., 1875; LL.B., Univ. of Michigan, 1873; Medical Ethics; d. Cleveland, 9-24-1920, a. 71.

*1902-03 Guy Harlan Fitzgerald, A.B., Univ. of Indiana, 1895; M.D., OWU, 1898; Physiology; living in Tucson, Ariz., 1944.

*1905-08 Charles John Aldrich, M.D., WU, 1882; Nervous and Mental Diseases; d. Cleveland, 4-29-1908, a. 47.

*1905-10 Alfred Clum, LL.B., George Washington Univ., 1883; LL.M., 1885; LL.D. (Hon.), Cleveland Law Sch., 1933; Medical Jurisprudence; d. San Diego, Calif., 6-28-1945, a. 82.

*1905-10 Martin Friedrich, M.D., WRU, 1894; Medicine; d. Cleveland, 4-8-1920, a. 64.

*1905-10 Benjamin Franklin Hambleton, B.S., Damascus Acad., 1894; M.D., OWU, 1900; Physiology; b. 1872; living in Houston, Tex., 1944.

*1905-10 John Nicholas Lenker, M.D., Coll. of Physicians and Surgeons, Baltimore, 1886; Otology, Rhinology, Laryngology; d. Cleveland, 10-20-1932 ,a. 67.

*1905-10 Milton Jay Lichty, Ph.B., Mt. Union Coll., 1892; A.M., 1910; M.D., Univ. of Pennsylvania, 1895; Medicine; d. Louisville, Ky., 2-15-1918, a. 48.

*1904-10 Robert Gilcrest Schnee, M.D., OWU, 1897; Bacteriology, Pathology; d. Cleveland, 11-27-1932, a. 60.

*1905-10 Arthur Julius Skeel, M.D., OWU, 1897; Anatomy, Obstetrics; d. Cleveland, 12-7-1942, a. 68.

*1905-10 Morris Daniel Stepp, M.D., WRU, 1893; Operative Surgery; d. Cleveland, 1-4-1944, a. 72.

*1909-10 John Franklin Davidson, M.D., Miami Medical Coll., 1887; Anatomy; d. Cleveland, 6-12-1925, a. 64.

*1909-10 Harry Bertolette Kurtz, M.D., WRU, 1893; Dermatology, Venereal Diseases; d. Cleveland, 8-21-1941, a. 71.

*1909-10 Walter Ball Laffer, M.D., WRU, 1896; Nervous and Mental Diseases; d. Cleveland, 7-28-1925, a. 54.

Deans

1864-81	Gustav Carl Erich Weber
1882-84	Leander Firestone
1884-91	Frank Jones Weed
1891-96	Marcus Rosenwasser
1896-1902	Charles Barnsdall Parker
1902-03	Nathan Stone Scott
1903-10	Roland Edward Skeel

APPENDIX G: OPENINGS AND COMMENCEMENTS

Academic Year	Openings	Commencements
1843-44	Nov. 1	Feb. 20
1844-45	Nov. 6	Feb. 26
1845-46	Nov. 5	Feb. 25
1846-47	Nov. 4	Feb. 24
1847-48	Nov. 3	Feb. 23
1848-49	Nov. 1	Feb. 20
1849-50	Nov. 7	Feb. 27
1850-51	Nov 6	Feb. 26
1851-52	Nov. 5	Feb. 25
1852-53	Nov. 3	Feb. 23
1853-54	Oct. 19	Feb. 22
1854-55	Oct. 18	Feb. 15
1855-56	Nov. 7	Feb. 29
1856-57	Nov. 5	Feb. 27
1857-58	Nov. 4	Feb. 26
1858-59	Nov. 3	Feb. 23
1859-60	Nov. 2	Feb. 21
1860-61	Nov. 7	Feb. 26
1861-62	Nov. 6	Feb. 25
1862-63	Nov. 5	Feb. 24
1863-64	Nov. 4	Mar. 1
1864-65	Oct. 26	Feb. 21
1865-66	Oct. 25	Feb. 16
1866-67	Oct. 31	Feb. 18
1867-68	Oct. 2	Feb. 4
1868-69	Oct. 7	Feb. 4
1869-70	Oct. 6	Feb. 1
1870-71	Oct. 5	Feb. 7
1871-72	Oct. 4	Feb. 20
1872-73	Oct. 2	Feb. 19
1873-74	Oct. 1	Feb. 18
1874-75	Oct. 7	Feb. 24
1875-76	Oct. 6	Feb. 23
1876-77	Sept. 27	Feb. 21
1877-78	Sept. 19	Mar 6
1878-79	Sept. 18	Mar. 5
1879-80	Sept. 17	Mar. 3
1880-81	Sept. 15	Mar. 2
1881-82	Sept. 14	Mar. 15
1882-83	Sept. 13	Feb. 28
1883-84	Sept. 12	Feb. 27
1884-85	Sept. 10	Feb. 25
1885-86	Sept. 16	Mar. 3

Academic Year	Openings	Commencements
1886-87	Sept. 22	Mar. 9
1887-88	Sept. 21	Mar. 7
1888-89	Sept. 19	Mar. 6
1889-90	Sept. 18	Mar. 5
1890-91	Sept. 17	Mar. 4
1891-92	Sept. 16	Mar. 3
1892-93	Sept. 15	Mar. 1
1893-94	Sept. 13	Mar. 1
1894-95	Sept. 12	May 22
1895-96	Sept. 18	May 20
1896-97	Sept. 16	May 18
1897-98	Sept. 22	May 25
1898-99	Oct. 5	June 15
1899-1900	Oct. 4	June 14
1900-01	Oct. 3	June 13
1901-02	Oct. 2	June 12
1902-03	Oct. 1	June 18
1903-04	Oct. 1	June 16
1904-05	Oct. 1	June 15
1905-06	Oct. 2	June 14
1906-07	Oct. 2	June 13
1907-08	Oct. 2	June 11
1908-09	Oct. 1	June 17
1909-10	Oct. 1	June 16
1910-11	Oct. 1	June 15
1911-12	Oct. 2	June 13
1912-13	Oct. 1	June 12
1913-14	Oct. 2	June 18
1914-15	Oct. 1	June 17
1915-16	Sept. 30	June 15
1916-17	Sept. 28	June 14
1917-18	Sept. 27	June 13
1918-19	Sept. 26	June 12
1919-20	Oct. 2	June 17
1920-21	Sept. 30	June 16
1921-22	Sept. 29	June 15
1922-23	Sept. 28	June 14
1923-24	Sept. 27	June 12
1924-25	Sept. 25	June 18
1925-26	Oct. 1	June 17
1926-27	Sept. 30	June 16
1927-28	Sept. 29	June 14
1928-29	Sept. 27	June 13
1929-30	Sept. 26	June 12
1930-31	Sept. 18	June 18
1931-32	Sept. 17	June 16
1932-33	Sept. 15	June 14

Academic Year	Openings	Commencements
1933-34	Sept. 14	June 13
1934-35	Sept. 13	June 12
1935-36	Sept. 19	June 10
1936-37	Sept. 24	June 16
1937-38	Sept. 23	June 15
1938-39	Sept. 22	June 14
1939-40	Sept. 21	June 12
1940-41	Sept. 19	June 11
1941-42	Sept. 25	June 5
1942-43	June 22	*Feb. 26
1943	*Mar. 1	*Oct. 28
1943-44	*Nov. 22	July 28

* The accelerated program was adopted early in 1942 because of war conditions. Under this arrangement the summer vacations of 1942 and 1943 were eliminated. This brought two commencements and two openings in the calendar year 1943.

APPENDIX H: ATTENDANCE AND GRADUATION

Academic Year	Attendance	Degrees in Course	Honorary Degrees
1843-44	67	18	6
1844-45	109	25	4
1845-46	160	53	4
1846-47	216	53	4
1847-48	240	71	6
1848-49	245	67	9
1849-50	255	62	8
1850-51	200	55	6
1851-52	201	54	5
1852-53	177	45	3
1853-54	142	45	5
1854-55	93	26	3
1855-56	110	39	5
1856-57	72	20	9
1857-58	78	19	0
1858-59	69	14	3
1859-60	67	18	1
1860-61	78	23	3
1861-62	80	19	3
1862-63	53	23	0
1863-64	61	22	2
1864-65	20 ?	14	0
1865-66	44 ?	18	1
1866-67	119	35	0
1867-68	107	45	4
1868-69	124	59	3
1869-70	103	54	3
1870-71	101	40	2
1871-72	76	36	2
1872-73	61	29	0
1873-74	59	19	3
1874-75	80	23	3
1875-76	86	35	2
1876-77	72	27	1
1877-78	74	26	1
1878-79	73	27	1
1879-80	87	28	1
1880-81	113	52	2
1881-82	191	83	3
1882-83	161	52	2
1883-84	168	74	3
1884-85	123	56	1
			Total 127

Academic Year	Attendance	Degrees in Course	Honorary Degrees
1885-86	119	44	
1886-87	142	38	
1887-88	135	49	
1888-89	124	45	
1889-90	124	32	
1890-91	120	27	
1891-92	146	36	
1892-93	157	45	
1893-94	93	22	
1894-95	105	32	
1895-96	136	27	
1896-97	127	31	
1897-98	127	41	
1898-99	108	5	
1899-1900	136	30	
1900-01	131	25	
1901-02	126	36	
1902-03	98	26	
1903-04	87	31	
1904-05	74	19	
1905-06	85	12	
1906-07	91	10	
1907-08	104	31	
1908-09	98	27	
1909-10	94	22	
1910-11	107	16	
	(plus 63 OWU)		
1911-12	135	34	
	(plus 41 OWU)		
1912-13	144	26	
	(plus 17 OWU)		
1913-14	160	29	
	(plus 3 OWU)		
1914-15	174	34	
1915-16	180	52	
1916-17	166	33	
1917-18	183	43	
1918-19	180	42	
1919-20	183	53	
1920-21	152	37	
1921-22	162	25	
1922-23	180	30	
1923-24	197	42	
1924-25	211	40	
1925-26	222	48	
1926-27	223	37	

Academic Year	Attendance	Degrees in Course	Honorary Degrees
1927-28	244	58	
1928-29	244	52	
1929-30	243	54	
1930-31	256	58	
1931-32	259	57	
1932-33	270	61	
1933-34	274	53	
1934-35	275	71	
1935-36	263	57	
1936-37	261	61	
1937-38	268	63	
1938-39	265	64	
1939-40	265	58	
1940-41	282	63	
1941-42	294	59	
1942-43	313	69 (February)	
Feb.-Oct. 1943	317	66 (October)	
	Average 151	Total 3991 in 101 classes	

The half-way point was reached when the fifty-third class was graduated in May 1896, making a total of exactly two thousand graduates in course.

The only source of statistics of attendance for 1864-65 and 1865-66 is the matriculation book, which is known not to have been signed by all students. Therefore the number of students given for these two years is probably fewer than actually attended.

APPENDIX I: ADDENDA

The manuscript of this volume was ready for printing four months after the end of the first hundred years of the institution, as shown by the date of the preface. Various conditions, some of them relating to the Second World War, have delayed printing for a year and a half. The title of "a centennial history" makes it inappropriate to revise the narrative to include events in the first two years of the second century.

However, some changes have been made in the appendices. Terminal dates have been added for officers in Appendix C, two names have been added to Appendix D, and in Appendix B terminal dates have been inserted for those who have died, retired, or withdrawn from the teaching staff. No record has been inserted in the appendices of new appointments or promotions since November 1, 1943.

Appendix I is added to give opportunity to record some important events since November 1, 1943. These affect persons mainly. Such personal references are restricted to professors and associate professors except for deaths and promotions.

Dr. Torald H. Sollmann retired on July 1, 1944 from the professorship of pharmacology and from the deanship and was appointed Professor Emeritus and Dean Emeritus. Dr. Arnold Demerrit Welch succeeded him in the professorship. The administration was carried by a committee of the faculty until April 1, 1945 when Dr. Joseph T. Wearn, Professor of Medicine, became the eleventh dean.

Dr. William W. Greulich, Professor of Physical Anthropolgy and Anatomy, resigned as of July 1, 1944 to become head of the department of anatomy at Stanford University.

Dr. Edmund Muntwyler, Professor of Experimental Biochemistry, resigned at the same time to become head of the department of biochemistry at Long Island Medical College.

Dr. John P. Quigley, Professor of Gastro-Intestinal Physiology, resigned in January 1945 to become head of the department of pharmacology in the Medical School of the University of Tennessee.

Dr. Harold D. Green, Associate Professor of Physiology, resigned in February 1945 to become Professor of Physiology and Pharmacology at the Bowman Gray School of Medicine.

Dr. Victor C. Myers resigned as secretary of the faculty in February 1945 and was succeeded in that office by Dr. Arnold D. Welch.

Dr. Henry J. Gerstenberger retired from the professorship of pediatrics on July 1, 1945 and was made an emeritus professor. Dr. Charles Fremont McKhann succeeded him.

Colonel Frederick S. Wright, Professor of Military Science and Tactics, retired in 1945 and was succeeded by Lieutenant George C. Kapnick.

Dr. John P. Sawyer, Emeritus Professor of Clinical Medicine and Therapeutics, died in Cleveland June 17, 1945, aged eighty-three years.

Dr. John Dickenson, Assistant Clinical Professor of Surgery, died in Cleveland July 9, 1945, aged sixty-eight years.

Dr. Walter B. Rogers, Assistant Clinical Professor of Surgery, died in Cleveland July 12, 1945, aged sixty-one years.

The following promotions were made as of July 1, 1944: to associate professor, Randall L. Thompson; to assistant professors, George W. Binkley, Charles G. LaRocco, Jacob W. Price, William F. Schneider; to senior instructors, Louis Pillemer, Edward M. Zucker.

The following promotions were made as of July 1, 1945: to associate professor, Albert S. Harris; to assistant professors, Huldah Bancroft, Frederic E. Caldwell, Lorand V. Johnson, Thomas C. Laipply, Louis Pillemer, Anna M. Young; to senior instructors, Frank M. Barry, Edward M. Chester, Carroll C. Dundon, Oliver Eitzen, William P. Jennings, Eugene F. Koster, Carl A. Kuether, Jack R. Leonards, Albert Loveman, John S. Mackrell, Walter H. Pritchard.

The names of these persons have not been changed in Appendix B from the groups of which they were members on November 1, 1943, nor have terminal dates been inserted therein.

The 102nd Commencement occurred September 28, 1944 with graduation of seventy-three men and women, and the 103rd Commencement occurred June 22, 1945 with graduation of eighty-seven men and women, the largest graduating class in the history of the institution.

Three new departments of the faculty were created in 1945: Bacteriology, detached from Hygiene and Public Health; Clinical Biochemistry, detached from Biochemistry; and Psychiatry, detached from Medicine. Dr. Douglas D. Bond was elected Professor of Psychiatry and head of the new department.

The Second World War has had a profound effect upon the operation of the institution. One hundred and three members of the teaching staff were in active service in the armed forces as of July 1, 1944. Statistics for the entire war are not available as this final proof is read. The students who were physically fit were given the status of active privates, put in uniform and given active pay. This condition ended before the end of the war.

The accelerated program came into operation in June 1942. One feature of it was the acceptance of new classes at intervals of approximately nine months. Decision was reached in December 1944 that thereafter only one new class would be accepted in each calendar year, in September, as was done before the war. This was the first definite step in this institution in unscrambling the confused conditions that have prevailed in medical education throughout the country since 1942. This medical school returned to normal schedule and operation within a year after the close of the First World War. The more complicated conditions during the Second World War indicate that a longer interval must intervene before normal conditions are again reached.

INDEX

THIS index, containing nearly 1,300 entries, is in two parts, a General Index and an Index of Persons, each alphabetically arranged and including the appendices. Consecutive pages are hyphenated.

The institutions at which individuals studied or from which they were graduated are not indexed, nor is the medical school of which this book is a history.

Medical subjects are indexed under modern terminology even when the older terminology is used on the page cited in the text; for example, the word "midwifery" in the text is indexed under the word "obstetrics." Some cross references are inserted applying to the changed terminology. Subjects are not indexed for those pages where they appear only in a teaching title.

The names of hospitals in Cleveland, when changed, are indicated by cross references. An illustration is indexed at the end of an entry, although the page cited is not in sequential order.

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